FMS E-Review 2005 Cover Sheet
07/16/12

INSPECTION COMPLETE

Load: A350_CERT1_TST_X04

Review ID:	8073.01	Life Cycle:	Low-Level Test Procedures	FAREA: TEST_PERF	DO-178 Level: B
Review Type:	Standard Meeting	ACM Project:	FMS2000	Rework Effort (hours):	0
Produced:	HTS - Shanghai	ACM Subproject:	A350_A380	Closure Effort (hours):	0.5

Review: Date | Time	Jan 6, 2014	15:00
Review Location:	Author's Cube	
Conference Room:	N/A	
Telephone | Participant Code:	N/A	N/A

Meeting Duration:	0.5
# Review Participants:	3
Date Complete:	1/16/14
Review Status: (result of review)	Accepted As Is

Moderator Closure → ☑

APPROVED
By Louis.Lu at 4:13 pm, Jan 16, 2014

Audit: Stamp Here

Some Work Deferred: ☐ Version(s) Unchanged: ☐

Work Product Type(s): A350

Supporting Material(s) / Comments:

Trace Data, Component Test

11_2_1_1.SRD ; 29
11_2_1_8.SRD ; 15
11_2_8_1.SRD ; 11
11_2_1_1_7.SRD; 20
11_2_1_13.SRD ; 20
11_5_1.SRD ; 6
11_3_5_1.SRD ; 33

Producer Employer:	Shanghai (Avionics excl EDS	Oversight Eligible:	☑
# of Producer Technical Defects:	0	# of Oversight Focal Technical Defects:	0
# of Producer Non-technical Defects:	0	# of Oversight Focal Non-technical Defects:	0
# of Producer Process Defects:	0	# of Oversight Focal Process Defects:	0

Work Products Under Review

Reuse Scope: N/A

Problem Report	File Name	File Version	Review Size	Size Units	Approved Version
8073.01	CTP_A350_PERF_BKGND_GET_BK_DATA.ZIP	15	22	undefined	15
8073.01	CTP_A350_PERF_BKGND_GET_BK_DATA.TDF	14	99	test case	14
8073.01	CTP_A350_PERF_BKGND_GET_BK_DATA.TRT	11	136	anchors	11

Participants

Name	Function (discipline)/ Responsibility	Review Time (hours)	Role in review	Attend	Will Close	Signature check complete
Lin Ye	S/W Test	1.0	Producer	☒		☑ REVIEWED By Lin Ye at 9:48 am, Jan 06, 2014
Louis.Lu	S/W Test	1.0	Moderator	☒	☒	☑ REVIEWED By Lous.Lu at 4:12 pm, Jan 16, 2014
			Oversight	☐	☐	☐
Yuzeng.Li	S/W Test	0.5	Reviewer	☒	☐	☑ REVIEWED By Yuzeng.Li at 4:13 pm, Jan 16, 2014
Gus.Granillo	Process		Reviewer	☐	☐	☐

Assignee's signature (stamp) confirms that a review was performed and any action Items and markups were incorporated or dispositioned.
Participant's signature (stamp) confirms participation in the review. A lack of signature (stamp) indicates nonparticipation.
Moderator's signature (stamp) indicates record is complete.
Oversight Reviewer's signature (stamp) indicates that Supplier Oversight was conducted.
Safety Focal's signature (stamp) indicates partiicpation of a Safety Focal.

FIELD LEGEND:	Pre-Populated/Producer	Producer	Moderator	Participants	Oversight

Coversheet Continued

Name	Function (discipline)/ Responsibility	Review Time (hours)	Role in review	Attend	Will Close	Signature check complete
Qiong.Zhou	PDQE		Auditor	☐	☐	☐
Daryl.Duncan	PDQE		Auditor	☐	☐	☐
				☐	☐	☐
				☐	☐	☐
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FIELD LEGEND:	Pre-Populated/Producer	Producer	Moderator	Participants	Oversight

Component Test Procedure (CTP) Checklist

(CTP_CHECKLIST_WORD.doc 10/24/07)

ACM Project: FMS2000
ACM Sub-Project: A350_A380
SCR Number: 8073.01
Affected Area: TEST_PERF

Overview: CTPs are generated to verify an individual software element or group of elements properly implement requirements the software element(s) trace to. Use this checklist to inspect test cases and associated test procedures, drivers, and stubs against requirements the software element(s) implement. The CTP(s) are verified to conform to standards, and fully test requirements with appropriate structural coverage. The associate tracing data and test coverage analysis/disposition data (if any) is also verified.

Misc Info Reference: FMS Test Process C71-5780-043, Section 5.

Yes	**No**	**N/A**	**Administrative**
●	○	○	1. Do the CTPs elements follow the standard naming conventions? CTP_<A/C>_<FAREA>_<FUNC-NAME>.TDF file – CTP Test Definition File CTP_< A/C >_<FAREA>_< FUNC-NAME >.ZIP file – miscellaneous test related files CTP_< A/C >_<FAREA>_< FUNC-NAME>.TRT file – CTP Trace file(Core only)
			CTP elements configured in the CM tool:
●	○	○	2. Is *.TDF file – CTP Test Definition File present?
●	○	○	3. Is *.ZIP file present?
●	○	○	4. Is *.TRT file – CTP Trace file present (Core only)?
			Review Packet information details:
●	○	○	5. Is SCR Number and a copy of the SCR (Sec state) present?
●	○	○	6. Is TDF, TRT(If present), ZIP files with correct generation information present?
●	○	○	7. Support files (SRD, SDD, and Checklist) with Generation information.
●	○	○	8. Does the review packet contain a difference listing of the old test to the new test and are the differences limited to the changes specified in this SCR?
●	○	○	9. Is the version of the material under review and supporting material correct for the SCR(s)?
●	○	○	10. Has the material/version been identified on the cover sheet of the review packet (may reference SCR)?
●	○	○	11. Have all SCR fields (e.g. Analysis/Solution) been filled out properly?

Yes **No** **N/A** **TDF (CTP Test Definition File)**

Does the TDF header include the following fields:

● ○ ○ 12. Does the TDF header include the following fields:

- Filename
- Title
- Author
- Creation Date
- Modification History
- Source
- Description of TDF

● ○ ○ 13. Is the SCR number and description updated for this SCR?

● ○ ○ 14. Does the TDF header include a unique ANCHOR name for this CTP?

● ○ ○ 15. Is the list of SRD/SDD element references (and their generation numbers) updated and correct? (including formatting of this information)

Yes **No** **N/A** **ZIP File (CTP Related Miscellaneous Files)**

● ○ ○ 16. Does the ZIP file contain the updated necessary test files ?

- *.BAT
- *.CUL
- ~~*.DRV~~ (*_D.ADA)
- ~~*.VER~~ (*.RST)
- *.RPT
- Optional files: STB, DSP, and INC (if necessary).
- Has the *.CUL file been updated to show the correct span of source code procedures/functions that are being tested by this CTP?

Yes	No	N/A	TRT File (Core only)
●	○	○	17. Does the TRT header include the following fields:
			• Filename
			• Title
			• Author
			• Creation Date
			• Modification History
			• Is the modification history with date, author, SCR number, and description updated?
●	○	○	18. Has the traceability matrix been updated/verified (trace to the correct requirements)??

Yes	No	N/A	Test Case Design
●	○	○	19. Are the test case ID numbers present in sequential order?
●	○	○	20. Does the test script have test case descriptions which describe the objectives, intent, and operation for each test case?
●	○	○	21. Are all the allocated requirements tested?
○	○	●	22. If anchor is found to be a bad trace or vague/ambiguous, has it been disposed with a reference SCR.
●	○	○	23. Does the test case description section of each test case identify the specific requirements (SRD anchors) that are being tested?
●	○	○	24. Does the test case description section of each test case identify the specific requirements (SRD anchors) that are supporting requirements?
●	○	○	25. To ensure robust testing, are all test cases inputs set with at least 2 different values?
●	○	○	26. To ensure robust testing, are boundary conditions and tolerances tested where ever applicable?

Yes	**No**	**N/A**	**Test Case Design con't**
●	○	○	27. Coverage Levels – Has every point of entry and exit in the program been invoked at least once?
●	○	○	28. Coverage Levels – Has every decision in the program taken on all possible outcomes at least once?
○	○	●	29. Coverage Levels – Has every condition in a decision in the program taken on all possible outcomes at least once?
○	○	●	30. Coverage Levels – Has every condition in a decision been shown to independently affect that decision's outcome? A condition is shown to independently affect a decision's outcome by varying just that condition while holding fixed all other possible conditions.
●	○	○	31. Data Coupling – Are there test cases which exercise "data coupling" between software modules (i.e., the dependence of a software component on data not exclusively under the control of that software component)?
●	○	○	32. Data Coupling – Are there test cases which exercise "control coupling" between software modules (i.e., the manner or degree by which one software component influences the execution of another software component)?
○	○	●	33. Error Guessing - Do areas in the software known to have complex algorithms have a sufficient number of test cases to ensure they are working as expected?
○	○	●	34. Error Guessing - Do areas in the software associated with complex requirements have a sufficient number of test cases to ensure they are working as expected?
●	○	○	35. Outputs - Are all test case outputs measured for at least two different values?
●	○	○	36. Outputs - Have variables with expected output values been initialized to other values before input to the test process (e.g., If a variable is expected to have an output result of TRUE, is the input state of this variable set to FALSE before executing the test case?)
●	○	○	37. Coverage Analysis - Are the entire test paths covered as per the structural coverage requirements mandated for Flight Management Systems? If not, are such structural coverage deficiencies dispositioned? If not determined to be a tool problem, then the disposition must reference to an SCR.
●	○	○	38. Coverage Analysis - For uncovered requirements, is there another test that provides the coverage?
●	○	○	39. Has the Test name and Anchor required if one exists, been identified? If not, has an SCR been written and the SCR number referenced?
○	○	●	40. Coverage Analysis – Have all the failures been analyzed and disposed appropriately in the DSP quoting a correct SCR number documenting the reason for the failures.

Yes	**No**	**N/A**	**Polymorphism Related Issues (C++)**
○	○	●	41. Has the code under test been examined for the existence of dynamic dispatch (can be determined by virtual functions in the code or a virtual table in the assembly code)?
○	○	●	42. Does each test case appearing in the set of test cases associated with a class appear in the set of test cases associated with each of its subclasses?
○	○	●	43. If dynamic dispatch is involved in the execution of a function, is the method separately tested in the context of every concrete class in which it appears, irrespective of whether it is defined by the class or inherited by it? An exception is made for simple get and set methods that only assign a value to, or return the value of an attribute or association. Such methods need only be tested once, in the context of the defining class.
●	○	○	44. Are errors dispositioned to an SCR or has the test been updated?

Yes	**No**	**N/A**	**Other**
○	○	●	45. Are all defects identified by the previous questions?

N N/A Justification Box

N/A:
For item 22 : there is no bad trace.
For item 29,30 : this CTP test follows Level B standard.
For item 33,34 : there are no "complex algorithms" or "complex requirements" for this CTP.
For item 40 : there are no failures in this CTP.
For item 41,42,43 : there is no C++ code or C++ stub code.
For item 45 : there is no defect found during review

Trace Checklist **(Trace_Check_Word.doc 8/5/09)**	**ACM Project:**	FMS2000
	ACM Sub-Project:	A350_A380
	SCR Number:	8073.01
	Affected Area:	TEST_PERF

Overview: Use this checklist to verify tracing data is correct, complete, and complies to standards.

Administrative

Y	N	N/A		
			1.	Are the following artifacts available at the work product review?
●	○	○	a	A copy of the applicable SCR(s)?
●	○	○	b	For non-TcSE, a copy of the trace file under review? For TcSE, a copy of the trace artifact or trace report under review?
●	○	○	c	A copy of the anchored requirement, design, test case/procedures, and/or source listings addressed by the trace file under review? (applicable pages only) (check Cover Sheet "Reference/Supporting Material" for element/gen.)

Trace File Standard – Applies to non-TcSE Only

Y	N	N/A		
			2.	Does the trace file header comply with the standard?
●	○	○	a	Header contains File Name and Revision History?
●	○	○	b	Is the Revision History description consistent with the SCR analysis?

Y	N	N/A		
			3.	Does the trace file trace information comply with the standard?
●	○	○	a	Are there 4 columns (Program, Relationship, Source_Anchor, Destination_Anchor) for each row?
●	○	○	b	Are the values for Relationship valid for the project?

Trace Data

Y	N	N/A		
			4.	Are anchors linked to appropriate higher-level document anchor(s)?
●	○	○		

Explanation for any "N" answer(s):

```
FMS2000 : A350_A380 - SYSTEM CHANGE REQUEST                          Page 1 of 3
 Change Category: PROBLEM                                       SCR No.: P 08073.01
 SCR Status: SEC   SCR Status Date:  5-JAN-2014
 Originator: O'Connor, Michael                        Date Originated:  25-DEC-2013
 Affected Area: TEST_PERF                             Customer No.:
 Assignee: Lin Ye                                     Priority:  4
 Verification Assignee: Lu,Louis
 Found in Configuration: A350_CERT1_SRC_S3            Hardcopy Attachment: None
 Target Configuration: A350_CERT1_TST_X04

 Planned Impact: Test
 Found During: HI OTHER
 Aircraft Affected: A350
 Task: N/A
 CR1-F41 Type:
 Earliest Applicabl: A380 EIS
 Risk of Regression: Low

SCR Copied To:              < None Entered >

SCR Copied From:              < None Entered >

SCR Reissued To:              < None Entered >

SCR Reissued From:              < None Entered >

 Title: SPD LIM missed in Tempy

 Description:

 Kayalvizhi D 7-Aug-2013
 -
 This SCR is created to document the lab SQK A380-A380 SSB3 -62652.
 -
 A tempy is created by insert next on the TO wpt or dirto while A/C
 is in descent above SPD LIM altitude: spd lim is predicted at econ
 des.
 -
 Scenario: with ABV1304001 init in air as in init_yamb picture Start
 FMCs, enter ZFW 150 ZFWCG 32 CI 15,2 dirto S2703.5/E15054.0 from
 this WPT, new dest YAMB, arrival ILS15-Y via DONNO. Delete disco
 before DONNO. fly in full managed mode.
 At T/D REACHED, engage descent in full managed mode. In full managed
 mode, DIRTO OK. Delete disco after OK. From OK insert next IBUNA: in
 tempy.
 SPD LIM is predicted at 300kts. Delete tempy. From PPOS dirto LL01
 (in front of the A/C): same observation See snapshots.
 -
 When the A/C is on path in VPATH/SPD mode and then the TMPY is
 created, the issue can be seen.
 -
 When the Active is Onpath and TMPY is below path, the Decel zone for
 DES SPD LIM is not predicted in TMPY and this is the reason the
 speed is predicted as Missed in TMPY.
 -
 When the Active is slightly above or below path, then the Decel is
 predicted in TMPY and it is shown as Made.
 -
 System Impact: Decel zone for DES SPD LIM is not predicted when

           < Description field continued >     SCR No. 08073.01    Page 2 of 3
 Active FPLN is Onpath and TMPY FPLN is belowpath.
 -
 Since the impact is seen only on the TMPY profile, P4 SCR is created.

 SRB Reviewed By: Jeff Renckly                          Date:  3-JAN-2014

 Analysis/Solution:

 <26-Dec-2013> Ye Lin (E828804) [HTS-C] :
 Created split as per request from E828804 (Ye, Lin).
 CTP_A350_PERF_BKGND_GET_BK_DATA needs update for SDD anchor PERF_SDD_09201_INT
 from PERF_BACKGROUND_EXEC.SDD as per updates under development SCR 8053.01
 ---------------------------------------------------------------------
 <Jan-06-2014><E828804>
 Updated CTP_A350_PERF_BKGND_GET_BK_DATA for A350 phase 5 Plan on build A01418
 and executed in ITE mode.
 1. TDF(Gen=14)
 Updated for A350 phase 5 on build A01418.
 1) Updated the SDD/SRD generation as following:
    11_2_2.SRD    ; 27 -> 29
    11_2_9.SRD    ; 8 -> 10
    PERF_BACKGROUND_EXEC.SDD; 96 -> 103
 2) Updated breakpoint for TCs
 1~6,8~10,14,15,17,18,22~24,26,28~34,39,40,59~61,73~79,82~84.
 3) Updated as per SCR# 8053.01:
  A. Added TCs 96~99 as PERF_SDD_09201_INT is added.
 2. ZIP(Gen=15)
 1) Updated DSP file.
 2) New Rst, Rpt file.
 3. TRT(Gen=11)
 Updated for A350 phase 5 on build A01418.
 1) Updated as per SCR# 8053.01:
  A. Added PERF_SDD_09201_INT.

 Elements Affected:

   Doc.      Element                                              Generation
   TEST      CTP_A350_PERF_BKGND_GET_BK_DATA.TDF                  14
   TEST      CTP_A350_PERF_BKGND_GET_BK_DATA.ZIP                  15
   TRACE     CTP_A350_PERF_BKGND_GET_BK_DATA.TRT                  11

             ASSIGNEE: Lin Ye                                        Date:  6-JAN-2014
             VERIFIER:                                               Date:
      CCB COORDINATOR:                                               Date:

 Closure Category: Fixed/Added           Duplicate SCR No.: 00000.00
 Project Status: Done
 Addendum:
 Review Info:
 Cert Concern:
 Cust Notification:
 Inservice Incident:
 FDE Distraction:
 Pilot Input:
 Workload Wrkaround:
 Must Fix:
 Score/Comment:
 Cause: N/A
```

```
Closed in Config.: A350_CERT1_TST_X04
```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF

```
FILE                  :  CTP_A350_PERF_BKGND_GET_BK_DATA.TDF

SOURCE CONFIGURATION  :  ISS (Instruction Set Simulator)

DESCRIPTION           :  This test is to verify that the variables are properly initialized.

MODIFICATION HISTORY  :
                         DATE          SCR #        AUTHOR             DESCRIPTION
                         =====         =====        ======             ===========
                      1-Aug-2011      1991.91      Bao Tingjie        Updated for A350 S1 Baseline on bulid A01082.
                                                                    1.Re-used the test from A380 Cert 2 and executed o
» n A350 S1
                                                                      Baseline Bulid A01082;
                                                                    2.Updated requirement files'version as:
                                                                      11_2_1_1.SRD  ; 84(FMS2000,A3XX)->5(FMS2000,A350
» _A380)
                                                                      11_2_1_8.SRD  ; 41(FMS2000,A3XX)->5(FMS2000,A350
» _A380)
                                                                      11_2_8_1.SRD  ; 29(FMS2000,A3XX)->4(FMS2000,A350
» _A380)
                                                                      11_2_1_1_7.SRD; 71(FMS2000,A3XX)->3(FMS2000,A350
» _A380)
                                                                      11_2_1_13.SRD ; 22(FMS2000,A3XX)->8(FMS2000,A350
» _A380)
                                                                      11_5_1.SRD    ; 25(FMS2000,A3XX)->3(FMS2000,A350
» _A380)
                                                                      11_3_5_1.SRD  ; 61(FMS2000,A3XX)->7(FMS2000,A350
» _A380)
                                                                      11_2_2.SRD    ; 33(FMS2000,A3XX)->6(FMS2000,A350
» _A380)
                                                                      11_2_9.SRD    ; 17(FMS2000,A3XX)->5(FMS2000,A350
» _A380)
                                                                      11_20_3.SRD   ; 34(FMS2000,A3XX)->2(FMS2000,A350
» _A380)
                                                                      11_21_6.SRD   ; 18(FMS2000,A3XX)->4(FMS2000,A350
» _A380)
                                                                      11_21_5.SRD   ; 19(FMS2000,A3XX)->2(FMS2000,A350
» _A380)
                                                                      11_21_7.SRD   ; 10(FMS2000,A3XX)->2(FMS2000,A350
» _A380)
                                                                      11_2_8_2.SRD  ; 13(FMS2000,A3XX)->2(FMS2000,A350
» _A380)
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
  28    28                                               11_1_6.SRD    ;9(FMS2000,A3XX)->2(FMS2000,A350_A
           » 380)
  29    29                                               11_2_1_10.SRD ;25(FMS2000,A3XX)->3(FMS2000,A350_
           » A380)
  30    30                                               11_2_1_11.SRD ;22(FMS2000,A3XX)->3(FMS2000,A350_
           » A380)
  31    31                                               11_2_1_5.SRD  ;29(FMS2000,A3XX)->4(FMS2000,A350_
           » A380)
  32    32                                               11_2_1_6.SRD  ;39(FMS2000,A3XX)->4(FMS2000,A350_
           » A380)
  33    33                                               11_2_1_7.SRD  ;34(FMS2000,A3XX)->3(FMS2000,A350_
           » A380)
  34    34                                               11_2_1_9.SRD  ;30(FMS2000,A3XX)->3(FMS2000,A350_
           » A380)
  35    35                                               PERF_BACKGROUND_EXEC.SDD;325(FMS2000,A3XX)->
  36    36                                                                         17(FMS2000,A350_A380)
  37    37                                               PERF_ADS.SDD   ; 46(FMS2000,A3XX)->4(FMS2000,A35
           » 0_A380)
  38    38                                             3.Modified the breakpoint number as code changed a
           » nd all IO
  39    39                                               relative SUT_VARS
  40    40                                             4.Updated TCs 1-6,8,10,14,15,18,19,22-24,26,28,33,
           » 34,52 to
  41    41                                               modifiy the breakpoint number and IO relative va
           » riables
  42    42                                             5.Updated as per SCR 741.01(FMS2000,A350_A380)
  43    43                                              1)Updated TCs 11-13,27 to delete PERF_SDD_08116_I
           » NT
  44    44                                              2)Updated TCs 16,17,25,27,41-43 to verify PERF_SD
           » D_4794_INT
  45    45                                                completely
  46    46                                              3)Updated TC 29 to verify PERF_SDD_08171_INT comp
           » letely.
  47    47                                              4)Updated TC 7 as the variable
  48    48                                                Perf_Background_Dpkg.Pshfdecel_found is deleted
  49    49                                             6.Updated as per SCR 632.20(FMS2000,A350_A380)
  50    50                                              1)Deleted PERF_SDD_07539_INT and PERF_SDD_07541_I
           » NT from TCs
  51    51                                                29,31,32 as they not allocated to A350 anymore.
  52    52                                              2)Updated TCs 16,29-32 to verify PERF_SDD_08225_I
           » NT completely
  53    53                                              3)Updated TCs 29,30,31 to verify PERF_SDD_08227_I
           » NT completely
  54    54                                              4)Updated TCs 9,39,40 to delete PERF_SDD_2248 and
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
        »  add
55  55                                                                         PERF_SDD_08226
56  56                                                                       5)Deteted PERF_SRD_6015 form TCs TCs 1-6,8-13 as
        » it is not
57  57                                                                         to traced to PERF_SDD_0409
58  58                                                                      7.Updated as per SCR 632.19(FMS2000,A350_A380)
59  59                                                                        1)Added PERF_SRD_23387 in TCs 1-6,8-13 as it tra
        » ced to
60  60                                                                          PERF_SDD_0409
61  61                                                                        2)Added PERF_SRD_23549 in TCs 9,39,40 as it trac
        » ed to
62  62                                                                          PERF_SDD_08226
63  63                                                                      8.Updated TCs 29-32,added TCs 59-61 to verify
64  64                                                                        PERF_SDD_07500_INT,
65  65                                                                        PERF_SDD_07501_INT,PERF_SDD_07502_INT,PERF_SDD_0
        » 7503_INT,
66  66                                                                        PERF_SDD_07504_INT,PERF_SDD_07505_INT,PERF_SDD_0
        » 7506,
67  67                                                                        PERF_SDD_07540_INT,PERF_SDD_07542_INT,PERF_SDD_0
        » 7543_INT
68  68
69  69                        DEC-25-2011     3149.08      Hao Zhilian      Updated for A350 S1.1 on build A01187.
70  70                                                                      1.Updated the SDD/SRD generation as following:
71  71                                                                        11_2_1_1.SRD  ; 5 -> 18
72  72                                                                        11_2_1_8.SRD  ; 5 -> 8
73  73                                                                        11_2_8_1.SRD  ; 4 -> 8
74  74                                                                        11_2_1_1_7.SRD; 3 -> 7
75  75                                                                        11_2_1_13.SRD ; 8 -> 15
76  76                                                                        11_5_1.SRD    ; 3 -> 6
77  77                                                                        11_3_5_1.SRD  ; 7 -> 14
78  78                                                                        11_2_2.SRD    ; 6 -> 18
79  79                                                                        11_2_9.SRD    ; 5 -> 7
80  80                                                                        11_20_3.SRD   ; 2 -> 4
81  81                                                                        11_21_6.SRD   ; 4 -> 9
82  82                                                                        11_21_5.SRD   ; 2 -> 3
83  83                                                                        11_21_7.SRD   ; 2 -> 3
84  84                                                                        11_2_8_2.SRD  ; 2 -> 3
85  85                                                                        11_2_1_10.SRD ; 3 -> 4
86  86                                                                        11_2_1_11.SRD ; 3 -> 4
87  87                                                                        11_2_1_5.SRD  ; 4 -> 6
88  88                                                                        11_2_1_6.SRD  ; 4 -> 6
89  89                                                                        11_2_1_7.SRD  ; 3 -> 6
90  90                                                                        11_2_1_9.SRD  ; 3 -> 7
91  91                                                                        PERF_BACKGROUND_EXEC.SDD; 17 -> 38
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
  92 |   92 |                                                                       PERF_ADS.SDD            ; 4  -> 6
  93 |   93 |                                                                     2.Updated the breakpiont number as the code change
     |      | » d.
  94 |   94 |                                                                     3.Updated TCs 1, 2, 8, 11, 25, 27, 29~32 to delete
     |      | »  the SDD
  95 |   95 |                                                                       anchor PERF_SDD_3731_INT as per SCR 494.01.
  96 |   96 |                                                                     4.Updated as per 391.01
  97 |   97 |                                                                       A.Added TCs 62~67 to verify the SDD anchor PERF_
     |      | » SDD_08588_INT
  98 |   98 |                                                                       B.Updated TCs 1~2 to verify the SDD anchor PERF_
     |      | » SDD_07496_INT
  99 |   99 |                                                                         completely.
 100 |  100 |                                                                     5.Updated as per 875.16
 101 |  101 |                                                                       A.Added TCs 62~64 to verify the SDD anchor PERF_
     |      | » SDD_08665.
 102 |  102 |                                                                       B.Added TCs 64~65 to verify the SDD anchor PERF_
     |      | » SDD_08666.
 103 |  103 |                                                                       C.Added TCs 63,65~67 to verify the SDD anchor PE
     |      | » RF_SDD_08667.
 104 |  104 |                                                                       D.Updated TC 7 and added TC 68 to verify the SDD
     |      | »  anchor
 105 |  105 |                                                                         PERF_SDD_4796 completely.
 106 |  106 |                                                                     6.Updated as per 870.01
 107 |  107 |                                                                       A.Updated TCs 19~21 and added TCs 69~72 to verif
     |      | » y the SDD
 108 |  108 |                                                                         anchor PERF_SDD_4600 completely.
 109 |  109 |
 110 |  110 |                       Feb-19-2012     3149.08      Hao Zhilian      Rework for A350 S1.1 on build A01187.
 111 |  111 |                                                                     1.Added SRD anchor PERF_SRD_23774 and updated TCs
     |      | » 63, 65~67
 112 |  112 |                                                                       to trace PERF_SDD_08667 to PERF_SRD_23774 under
     |      | » SCR 875.15.
 113 |  113 |                                                                     2.Modified the description of TCs 7, 19~21 and 68~
     |      | » 72.
 114 |  114 |                                                                     3.Modified TC 70 to verify PERF_SDD_4600 completel
     |      | » y.
 115 |  115 |
 116 |  116 |                      3-July-2012      4418.03      Sun Likun        Updated for A350 S2 Baseline on bulid A01256.
 117 |  117 |                                                                     1.Updated the SDD/SRD generation as following:
 118 |  118 |                                                                       11_2_1_10.SRD ; 4->7
 119 |  119 |                                                                       PERF_BACKGROUND_EXEC.SDD; 38->50
 120 |  120 |                                                                     2.Added SRD anchor PERF_SRD_23964, PERF_SRD_23965,
     |      | »
 121 |  121 |                                                                       PERF_SRD_24100 to trace to PERF_SDD_0409 under S
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
          » CR 2889.04.
 122  122                                                                3.Update breakpoints as per code changed.
 123  123                      12-July-2012      4418.03      Sun Likun       Rework after HTS-C review.
 124  124                                                                1.Updated 11_2_1_10.SRD generation in SDD/SRD DETA
          » ILS.
 125  125
 126  126                      20-Nov-2012      5391.10      Dun Qing      Updated for A350 S2 on build A01283.
 127  127                                                                1.Updated the SDD/SRD generation as following:
 128  128                                                                  11_2_1_1.SRD  ; 18 -> 26
 129  129                                                                  11_2_1_8.SRD  ; 8 -> 9
 130  130                                                                  11_2_1_1_7.SRD; 7 -> 19
 131  131                                                                  11_2_1_13.SRD ; 15 -> 18
 132  132                                                                  11_3_5_1.SRD  ; 14 -> 23
 133  133                                                                  11_2_2.SRD    ; 18 -> 24
 134  134                                                                  11_2_9.SRD    ; 7 -> 8
 135  135                                                                  11_21_6.SRD   ; 9 -> 11
 136  136                                                                  11_2_1_11.SRD ; 4 -> 7
 137  137                                                                  11_2_1_9.SRD  ; 7 -> 10
          »
 138  138                                                                  PERF_BACKGROUND_EXEC.SDD; 50 -> 66
 139  139                                                                  Added the SDD/SRD generation as following:
 140  140                                                                  11_1.SRD
 141  141                                                                2.Updated the breakpiont number as the code change
          » d.
 142  142                                                                3.Updated SUT_VARS and NOTES
 143  143                                                                4.Updated as per 3652.00
 144  144                                                                  A.Added TCs 73~78 and Updated TC 39 to verify th
          » e SDD anchor PERF_SDD_09063
 145  145                                                                  B.Added TCs 73~74 to verify the SDD anchor PERF_
          » SDD_09064
 146  146                                                                  C.Added TCs 73 and Updated TCs 9,39,40 to verify
          »  the SDD anchor PERF_SDD_08226
 147  147                                                                  D.Added following SRD anchor:
 148  148                                                                     PERF_SRD_2801, PERF_SRD_23365, PERF_SRD_23455
          » ,
 149  149                                                                     PERF_SRD_23478, PERF_SRD_23491,PERF_SRD_23503
          » _INT,
 150  150                                                                     PERF_SRD_2489
 151  151                                                                   Added following SDD anchor:
 152  152                                                                     PERF_SDD_09063, PERF_SDD_09064
 153  153                                                                   Removed following trace links:
 154  154                                                                     PERF_SDD_08226 -->   PERF_SRD_10721
 155  155                                                                     PERF_SDD_08226 -->   PERF_SRD_23549
 156  156                                                                   Added following trace links:
```

```
 157   157                                                                            PERF_SDD_08226 --> PERF_SRD_2801
 158   158                                                                            PERF_SDD_08226 --> PERF_SRD_23365
 159   159                                                                            PERF_SDD_08226 --> PERF_SRD_23455
 160   160                                                                            PERF_SDD_09063 --> PERF_SRD_23478
 161   161                                                                            PERF_SDD_09063 --> PERF_SRD_23491
 162   162                                                                            PERF_SDD_09064 --> PERF_SRD_23503_INT
 163   163                                                                            PERF_SDD_09064 --> PERF_SRD_2489
 164   164                                                                      5.Updated as per 5637.01
 165   165                                                                        A.Added TCs 73~74 and Modified TC 68 to verify t
            » he SDD anchor PERF_SDD_0409.
 166   166                                                                        B.Removed trace link PERF_SDD_0409 --> PERF_SRD_
            » 23964
 167   167                                                                      6.Updated as per 5309.02
 168   168                                                                        A.Added TC 73 to verify the SDD anchor PERF_SDD_
            » 4155_INT
 169   169
 170   170                       26-Nov-2012      5391.10      Dun Qing       Rework after HTSC inspection.
 171   171                                                                      1.Modified the description of TCs 1,2,39,40,68,73,
            » 74
 172   172
 173   173                       17-Jul-2013      7226.01      Jiang Xiaomin      Updated for A350 S3 on build A01344.
 174   174                                                                        1.Updated the SDD/SRD generation as following:
 175   175                                                                          11_2_1_1.SRD  ; 26 -> 28
 176   176                                                                          11_2_1_8.SRD  ; 9 -> 15
 177   177                                                                          11_2_8_1.SRD  ; 8 -> 11
 178   178                                                                          11_2_1_1_7.SRD; 19 -> 20
 179   179                                                                          11_2_1_13.SRD ; 18 -> 20
 180   180                                                                          11_3_5_1.SRD  ; 23 -> 30
 181   181                                                                          11_2_2.SRD    ; 24 -> 27
 182   182                                                                          11_20_3.SRD   ; 4 -> 5
 183   183                                                                          11_1_6.SRD    ; 2 -> 3
 184   184                                                                          11_2_1_10.SRD ; 7 -> 14
 185   185                                                                          11_2_1_6.SRD  ; 6 -> 7
 186   186                                                                          11_2_1_7.SRD  ; 6 -> 10
 187   187                                                                          11_2_1_9.SRD  ; 10 ->20
 188   188                                                                          11_1.SRD  ;  32 ->37
 189   189                                                                          PERF_BACKGROUND_EXEC.SDD; 66 -> 91
 190   190                                                                        2.Updated the breakpiont number as the code chan
            » ged.
 191   191                                                                        3.Added the TC83_85 to verify the ANCHOR PERF_SD
            » D_0409 completely
 192   192                                                                          as per scr 5970.01&3184.02&7649.01.
 193   193                                                                        4.Updated the TC73 to verify the ANCHOR PERF_SDD
            » _4155_INT completely
```

```
194  194                                                                            as per scr 7665.03&7649.01.
195  195                                                                          5.Updated the TC7&68 to verify the ANCHOR PERF_S
          » DD_4796 completely
196  196                                                                            as per scr 3184.02.
197  197                                                                          6.Updated the TC73_79 and added the TC80_82 to v
          » erify the ANCHOR
198  198                                                                            PERF_SDD_09063 completely as per scr 7191.00.
199  199                                                                          7.Added the anhor PERF_SRD_6005_INT and trace to
          »  related TCs
200  200                                                                            as per scr 3184.01.
201  201                                                                          8.Corrected the input of TC19_21&68_72.
202  202
203  203                      23-Aug-2013      7226.01      Jiang Xiaomin         Rework after HTSC inspection.
204  204                                                                          1.Corrected he previous histroy.
205  205                                                                          2.Corrected the TC7 for mistake.
206  206                                                                          3.Removed the TC79 for duplicated and corrected
          » the TC80's description.
207  207
208  208                      11-Sep-2013      7854.01      Ye Lin                Updated for A350 S3 on build A01365.
209  209                                                                          1.Updated the SDD/SRD generation as following:
210  210                                                                            11_2_1_1.SRD  ; 28 -> 29
211  211                                                                            11_3_5_1.SRD  ; 30 -> 33
212  212                                                                            11_1.SRD      ;  37 -> 43
213  213                                                                            PERF_BACKGROUND_EXEC.SDD; 91 -> 96
214  214                                                                          2.Updated the breakpiont number as the code chan
          » ged.
215  215                                                                          3.Updated as per SCR 7708.01
216  216                                                                           A.Changed PERF_SDD_07540_INT to PERF_SDD_07540.
217  217                                                                          4.Updated as per SCR 7854.01
218  218                                                                           A.Modified TCs 8,34~38 as per SDD PERF_SDD_2249
          » _INT
219  219                                                                             is updated.
220  220                                                                           C.Added TCs 85~95 as per SDD PERF_SDD_2249_INT
          » is updated.
221  221
222  222                      09-Oct-2013      7854.01      Ye Lin                Rework after HTSC inspection.
223  223                                                                          1. Modified the previous history.
224  224
225  225                      15-Oct-2013      7854.01      Ye Lin                Rework after self-review.
226  226                                                                          1. Deleted PERF_SRD_10721 because it do not need
          »  to be tested here.
227  227
     228                      26-Dec-2013      8073.01      Lin Ye                Updated for A350 phase 5 on build A01418.
     229                                                                          1. Updated the SDD/SRD generation as following:
      230                                                                  11_2_2.SRD    ; 27 -> 29
      231                                                                  11_2_9.SRD    ; 8 -> 10
      232                                                                  PERF_BACKGROUND_EXEC.SDD; 96 -> 103
      233                                                               2. Updated breakpoint for TCs 1~6,8~10,14,15,17,
          » 18,22~24,26,28~34,39,40,59~61,73~79,82~84.
      234                                                               3. Updated as per SCR# 8053.01:
      235                                                                A. Added TCs 96~99 as PERF_SDD_09201_INT is add
          » ed.
      236
228   237 SRD/SDD DETAILS        :  11_2_1_1.SRD  ; 29
229   238                           11_2_1_8.SRD  ; 15
230   239                           11_2_8_1.SRD  ; 11
231   240                           11_2_1_1_7.SRD; 20
232   241                           11_2_1_13.SRD ; 20
233   242                           11_5_1.SRD    ; 6
234   243                           11_3_5_1.SRD  ; 33
235       ~~                        11_2_2.SRD    ; 27~~
236       ~~                        11_2_9.SRD    ; 8~~
      244                           11_2_2.SRD    ; 29
      245                           11_2_9.SRD    ; 10
237   246                           11_20_3.SRD   ; 5
238   247                           11_21_6.SRD   ; 11
239   248                           11_21_5.SRD   ; 3
240   249                           11_21_7.SRD   ; 3
241   250                           11_2_8_2.SRD  ; 3
242   251                           11_1_6.SRD    ; 3
243   252                           11_2_1_10.SRD ; 14
244   253                           11_2_1_11.SRD ; 7
245   254                           11_2_1_5.SRD  ; 6
246   255                           11_2_1_6.SRD  ; 7
247   256                           11_2_1_7.SRD  ; 10
248   257                           11_2_1_9.SRD  ; 20
249       ~~                        11_1.SRD      ;  43~~
250       ~~                        PERF_BACKGROUND_EXEC.SDD; 96~~
      258                           11_1.SRD      ; 43
      259                           PERF_BACKGROUND_EXEC.SDD; 103
251   260                           PERF_ADS.SDD            ; 6
252   261
253   262 TRACE DETAILS          :
254   263                           ANCHOR  :  A350_PERF_TEST_2401
255   264
256   265                           SOURCE  :  SDD; PERF_SDD_0410, PERF_SDD_0412_INT, PERF_SDD_3317_INT, PERF_SDD_4778_INT, PERF_
          » SDD_4779_INT,
257   266                                      PERF_SDD_0417_INT, PERF_SDD_3681_INT, PERF_SDD_3682_INT, PERF_SDD_4780_INT, P
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File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
            » ERF_SDD_4795,
 258   267                                           PERF_SDD_0418_INT, PERF_SDD_2174_INT, PERF_SDD_2177_INT, PERF_SDD_4794_INT,
 259   268                                           PERF_SDD_2852_INT, PERF_SDD_2853_INT, PERF_SDD_2249_INT, PERF_SDD_2276_INT, P
            » ERF_SDD_4796,
 260   269                                           PERF_SDD_3482_INT, PERF_SDD_2293_INT, PERF_SDD_3053_INT, PERF_SDD_3055_INT,
 261   270                                           PERF_SDD_3105, PERF_SDD_0409, PERF_SDD_2123_INT, PERF_SDD_07919, PERF_SDD_079
            » 56,
 262   271                                           PERF_SDD_4155_INT, PERF_SDD_4327, PERF_SDD_3746_INT, PERF_SDD_3718,
 263   272                                           PERF_SDD_3887, PERF_SDD_4328, PERF_SDD_4339,
 264   273                                           PERF_SDD_5585, PERF_SDD_4600, PERF_SDD_5607_INT, PERF_SDD_5608_INT,
 265   274                                           PERF_SDD_5610_INT, PERF_SDD_5611_INT, PERF_SDD_07160_INT, PERF_SDD_07169_INT,
 266   275                                           PERF_SDD_07188_INT, PERF_SDD_07496_INT, PERF_SDD_07497_INT, PERF_SDD_07498_IN
            » T,
 267   276                                           PERF_SDD_07499_INT, PERF_SDD_07500_INT, PERF_SDD_07501_INT, PERF_SDD_07502_IN
            » T,
 268   277                                           PERF_SDD_07503_INT, PERF_SDD_07504_INT, PERF_SDD_07505_INT, PERF_SDD_07506,
 269   278                                           PERF_SDD_3888_INT, PERF_SDD_07540,
 270   279                                           PERF_SDD_07542_INT, PERF_SDD_07543_INT, PERF_SDD_07544_INT, PERF_SDD_07545_IN
            » T,
 271   280                                           PERF_SDD_07546_INT, PERF_SDD_07547_INT, PERF_SDD_07548_INT, PERF_SDD_07549,
 272   281                                           PERF_SDD_5609_INT, PERF_SDD_07495_INT, PERF_SDD_08158_INT, PERF_SDD_08171_INT
            » ,
 273   282                                           PERF_SDD_08159_INT, PERF_SDD_08225_INT, PERF_SDD_08227_INT, PERF_SDD_08226,
 274   283                                           PERF_SDD_08588_INT, PERF_SDD_08665, PERF_SDD_08666, PERF_SDD_08667,
 275        ~~                                         PERF_SDD_09063, PERF_SDD_09064,~~
       284                                           PERF_SDD_09063, PERF_SDD_09064, PERF_SDD_09201_INT
 276   285
 277   286                                      SRD; PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_IN
            » T,
 278   287                                           PERF_SRD_10200_INT, PERF_SRD_12371_INT, PERF_SRD_1554_A3XX,
 279   288                                           PERF_SRD_1919, PERF_SRD_6057, PERF_SRD_8964_INT, PERF_SRD_1592,
 280   289                                           PERF_SRD_8976_INT, PERF_SRD_10199_INT, PERF_SRD_1490_INT,
 281   290                                           PERF_SRD_12437, PERF_SRD_12370_INT, PERF_SRD_12404,
 282   291                                           PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR,
 283   292                                           PERF_SRD_12517_DR, PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT,
 284   293                                           PERF_SRD_1584_A3XX, PERF_SRD_12409_INT, PERF_SRD_1358,
 285   294                                           PERF_SRD_9587, PERF_SRD_9656_INT, PERF_SRD_6192, PERF_SRD_6012, PERF_SRD_1590
            » ,
 286   295                                           PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT,
 287   296                                           PERF_SRD_12670_INT, PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_IN
            » T,
 288   297                                           PERF_SRD_23387, PERF_SRD_23549, PERF_SRD_23775, PERF_SRD_23964, PERF_SRD_2396
            » 5,
 289   298                                           PERF_SRD_24100, PERF_SRD_23455, PERF_SRD_23478, PERF_SRD_23491, PERF_SRD_2350
```

```
» 3_INT
                                         PERF_SRD_23365,PERF_SRD_2489,PERF_SRD_2801, PERF_SRD_6005_INT
»

**********************************************************************************************************************
» *****
INITIALIZATIONS:

FP_DEF_TOL = 0.001

define symbol True                                 := Standard.True
define symbol False                                := Standard.False
define symbol Engoutnotval                         := Perf_Int_Base_Tpkg.Engoutnotval
define symbol Nopreds                              := Perf_Int_Base_Tpkg.Nopreds
define symbol Prdstodest                           := Perf_Int_Base_Tpkg.Prdstodest
define symbol Preflight                            := base_domain_services_tpkg.Preflight
define symbol Takeoff                              := base_domain_services_tpkg.Takeoff
define symbol Cruise                               := base_domain_services_tpkg.Cruise
define symbol Descent                              := base_domain_services_tpkg.Descent
define symbol Approach                             := base_domain_services_tpkg.Approach
define symbol Goaround                             := base_domain_services_tpkg.Goaround
define symbol Climb                                := base_domain_services_tpkg.Climb
define symbol Altpln                               := Perf_Int_Base_Tpkg.Altpln
define symbol No_Itinerary                         := Perf_Int_Base_Tpkg.No_Itinerary
define symbol Fuel_Plan_Fpln_Preds                 := Perf_Int_Base_Tpkg.Fuel_Plan_Fpln_Preds
define symbol Secondary                            := Fprequestrec_Types.Secondary
define symbol Secondary2                           := Fprequestrec_Types.Secondary2
define symbol Secondary3                           := Fprequestrec_Types.Secondary3
define symbol Is_Active                            := Perf_Int_Base_Tpkg.Is_Active
define symbol Indep_From_Active                    := Perf_Int_Base_Tpkg.Indep_From_Active
define symbol Valid                                := Io_interface_tpkg.Entry_Stat_Type'(Io_interface_tpkg.Valid)
define symbol Invalid                              := Io_interface_tpkg.Entry_Stat_Type'(Io_interface_tpkg.Invalid)
define symbol Fuel_Plan_Stage1                     := Perf_Int_Base_Tpkg.Fuel_Plan_Stage1
define symbol Active                               := Fprequestrec_Types.Active
define symbol Temporary                            := Fprequestrec_Types.Temporary
define symbol Prim_Fpln_Preds                      := Perf_Int_Base_Tpkg.Prim_Fpln_Preds
define symbol Current_Mode_Preds                   := Perf_Int_Base_Tpkg.Current_Mode_Preds
define symbol Current_Mode_Hi_Pri                  := Perf_Int_Base_Tpkg.Current_Mode_Hi_Pri
define symbol Pred_To_Alt_Preds                    := Perf_Int_Base_Tpkg.Pred_To_Alt_Preds
define symbol Fuel_Plan_Stage2                     := Perf_Int_Base_Tpkg.Fuel_Plan_Stage2
define symbol Cas                                  := Fmcs_Base_Types.Cas
define symbol Nopath                               := Perf_Despath_Tpkg.Nopath
define symbol Onpath                               := Perf_Despath_Tpkg.Onpath
define symbol INVALIDPATH                          := Perf_Despath_Tpkg.INVALIDPATH
```

```
 331  340 define symbol Zeroab                               := Perf_Int_Base_Tpkg.Zeroab
 332  341 define symbol Fullab                               := Perf_Int_Base_Tpkg.Fullab
 333  342 define symbol Clb_Spdlim                           := Perf_Buffer_Types.Clb_Spdlim
 334  343 define symbol Clean                                := Perf_Config_Dpkg.Clean
 335  344 define SYMBOL Copy_From_Active                     := Perf_Int_Base_Tpkg.Copy_From_Active
 336  345 define SYMBOL No_Preds                             :=  Perf_Int_Base_Tpkg.No_Preds
 337  346 define symbol Noise_End_Alt_Status := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
          » _Status"
 338  347 define symbol Noise_Speed_Val      := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_V
          » al"
 339  348 define Symbol Noise_TSPD           := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_TSPD"
 340  349 define symbol Noise_End_Alt        := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
          » "
 341  350 define symbol Noise_Speed          := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed"
 342  351 define symbol Noise_Thrust         := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Thrust"
 343  352 define symbol Drtnone              := Cdk_Entry_Tpkg.Climb_Thrust_Mode_Type'value("Drtnone")
 344  353 define symbol Maxclb               := Cdk_Entry_Tpkg.Climb_Thrust_Mode_Type'value("Maxclb")
 345  354 define SYMBOL Icaolimited          :=  Spdchgtgt_Tpkg.Icaolimited
 346  355 define SYMBOL Returntoecon         :=  Spdchgtgt_Tpkg.Returntoecon
 347  356 define SYMBOL Optimum_Altitude     := Perf_Int_Base_Tpkg.Optimum_Altitude
 348  357 
 349  358 SUT_VARS
 350  359 -- enumeration types
 351  360 Clb_Spdlim
 352  361 True
 353  362 False
 354  363 Engoutnotval
 355  364 Nopreds
 356  365 Prdstodest
 357  366 Preflight
 358  367 Takeoff
 359  368 Cruise
 360  369 Goaround
 361  370 Climb
 362  371 Altpln
 363  372 Fuel_Plan_Fpln_Preds
 364  373 Fuel_Plan_Stage1
 365  374 Active
 366  375 Prim_Fpln_Preds
 367  376 Current_Mode_Preds
 368  377 Current_Mode_Hi_Pri
 369  378 Pred_To_Alt_Preds
 370  379 Is_Active
 371  380 Indep_From_Active
```

```
372    381 Secondary
373    382 Secondary2
374    383 Secondary3
375    384 Valid
376    385 Invalid
377    386 Perf_Ext_Tpkg.Vmnone
378    387 Perf_Ext_Tpkg.Vmspd
379    388 Perf_Ext_Tpkg.Vmecon
380    389 Perf_Ext_Tpkg.Vmexped
381    390 Nopath
382    391 Onpath
383    392 INVALIDPATH
384    393 Zeroab
385    394 Fullab
386    395 Descent
387    396 Approach
388    397 Cas
389    398 No_Itinerary
390    399 Copy_From_Active
391    400 Noise_End_Alt_Status
392    401 Noise_Speed_Val
393    402 No_Preds
394    403 Temporary
395    404 Noise_TSPD
396    405 Optimum_Altitude
397    406
398    407 -- variables
399    408 Perf_Background_Dpkg.Psgw
400    409 Perf_Background_Dpkg.Pcgwind
401    410 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
402    411 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
403    412 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
404    413 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
405    414 Perf_Background_Dpkg.Pcactorsec
406    415 Perf_Background_Dpkg.Psignorehm
407    416 Perf_Background_Dpkg.Pcfltphase
408    417 Perf_Background_Dpkg.Psairborne
409    418 Perf_Background_Dpkg.Psautolat
410    419 Perf_Background_DPkg.Psengout
411    420 Perf_Background_Dpkg.Dest_Wind_Components.Dest_Wind_Valid
412    421 Perf_Background_Dpkg.Dest_Wind_Components.Psvcdu
413    422 Perf_Background_Dpkg.Dest_Wind_Components.Psvcdy
414    423 Perf_Retained_Dpkg.Psvcdu(Active).Valid
415    424 Perf_Retained_Dpkg.Psvcdu(Active).Data
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
 416   425 Perf_Retained_Dpkg.Psvcdy(Active).Data
 417   426 Cdk_Vert_Dpkg:Body.Engine_Out_I
 418   427 Perf_Background_Dpkg.Psacalt
 419   428 Perf_Background_Dpkg.Pstropoalt
 420   429 Perf_Background_DPkg.Pshmdecel
 421   430 Perf_Background_Dpkg.Pcholdflags.Hmdecel
 422   431 Perf_Background_Dpkg.Pcholdflags.Hmactive
 423   432 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
 424   433 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
 425   434 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
 426   435 Perf_Background_Dpkg.Pcholdflags.Hmdistval
 427   436 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
 428   437 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel
 429   438 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn
 430   439 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel
 431   440 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv
 432   441 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval
 433   442 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
 434   443 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
 435   444 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel
 436   445 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
 437   446 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
 438   447 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
 439   448 Perf_Background_Dpkg.Psappspdlat
 440   449 Perf_Dpkg.Pcengoutprds
 441   450 Fmcs_Base_Types.Mach
 442   451 Perf_Background_Dpkg.Pcpathref
 443   452 Perf_Background_DPkg.Pscurcas
 444   453 Perf_Background_DPkg.Pscurmach
 445   454 Perf_Background_DPkg.Pscurtas
 446   455 Perf_Background_Dpkg.Pstogwtval
 447   456 Perf_Background_Dpkg.Pstogwt
 448   457 Perf_Dpkg.Gross_Weight.Data
 449   458 Perf_Dpkg.takeoff_gwt.valid
 450   459 perf_dpkg.takeoff_gwt.data
 451   460 Guid_Ext_Dpkg.Va3Vertmde
 452   461 Perf_Background_Dpkg.Pcacconfig
 453   462 Perf_Background_Dpkg.Psstpclbact
 454   463 Perf_Background_Dpkg.Psstpdesact
 455   464 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
 456   465 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
 457   466 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
 458   467 Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid
 459   468 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
 460   469 Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid
 461   470 Perf_Background_Dpkg.Pcprebcalt.Valid
 462   471 Perf_Background_Dpkg.Pcgmttime.Hour
 463   472 Perf_Background_Dpkg.Pcgmttime.Minute
 464   473 Perf_Background_Dpkg.Pcgmttime.Second
 465   474 Perf_Background_Dpkg.Psinertvs
 466   475 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
 467   476 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
 468   477 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
 469   478 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
 470   479 Perf_Ads_Dpkg.Ii_Enabled
 471   480 Perf_Ads_Dpkg.Fi_Enabled
 472   481 Perf_Ads_Dpkg.Pr_Enabled
 473   482 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
 474   483 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
 475   484 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
 476   485 Perf_Integration_Dpkg.Psoldnoentgt
 477   486 Perf_Background_Dpkg.Pcoldcasmchi
 478   487 Perf_Dpkg.Gross_Weight.Status
 479   488 Perf_Despath_Dpkg.Pcdespath.Vgavalid
 480   489 Perf_Background_Dpkg.Pcspeedmode
 481   490 Perf_Integration_Dpkg.Pcairbrakes
 482   491 Perf_Database_Dpkg.Psmmo
 483   492 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds()().Valid
 484   493 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds()().Cas
 485   494 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds()().Mach
 486   495 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds().Valid
 487   496 Perf_Background_Dpkg.Pszfw
 488   497 Perf_Background_DPkg.Psblockfuel
 489   498 Perf_Background_Dpkg.Pstaxifuel
 490   499 Perf_Dpkg.Min_Gwt
 491   500 Perf_Dpkg.Max_Gwt
 492   501 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
 493   502 Perf_Background_Dpkg.Ats_Enable
 494   503 ATC_DISCRETES_PKG:body.Adson_Flag
 495   504 Guid_Ext_Dpkg.Gcxxlatautoc
 496   505 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
 497   506 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
 498   507 Perf_Dpkg.Repredict_Hm_Decel
 499   508 Perf_Background_Dpkg.Psgetout
 500   509 Perf_Background_Dpkg.Ref_Flight_Plan
 501   510 Perf_Ext_Despath:Body.data_storage(Active).Pgvdespath.Vgavalid
 502   511 Clean
 503   512 Perf_Background_Dpkg.Pscrzalt.Valid
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
504  513 Perf_Background_Dpkg.Adc_Fg_Valid
505  514 Prf_Bkgnd_Pkg:body.Fgspdsvalid
506  515 Perf_Background_Dpkg.Pccuraltcstr.Valid
507  516 Perf_Speeds()().Valid
508  517 Perf_Speeds()().Cas
509  518 Perf_Speeds()().Mach
510  519 Requested_Pred_Route
511  520 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid
512  521 Perf_Background_Dpkg.Psenginesoff
513  522 Takeoff_Alt_Types.Active
514  523 Takeoff_Alt_Types.Inactive
515  524 CTP_A350_PERF_BKGND_GET_BK_DATA.DAta_set
516  525 CTP_A350_PERF_BKGND_GET_BK_DATA.DAta_set_valid
517  526 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt_Status
518  527 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
519  528 Perf_Background_Dpkg.Noise_Data.Speed.Valid
520  529 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints
521  530 Perf_Background_Dpkg.Pcitin.Itinerary
522  531 Perf_Background_Dpkg.Pcitin.Flight_Plan
523  532 system'address
524  533 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1
525  534 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.FRAME_120_Disc_Word_3.Final_Descent_Mode_Active
526  535 Io_Adc_Sel_Pkg.The_Selected_Adc
527  536 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Sat
528  537 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
529  538
530  539 Io_IRS_Sel_Pkg.The_Selected_IRS
531  540 Io_IRS_Sel_Pkg.The_Selected_IRS.all.Io_IRS_MSG2_Validity_Rec.Inertial_Vert_Speed
532  541 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai
533  542 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai
534  543 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond
535  544 Perf_Background_Dpkg.Ac_Anti_Ice
536  545 Prf_Bkgnd_Pkg:BODY.Valcrzalt
537  546 Perf_Background_Dpkg.Flight_Plan_Type
538  547 Noise_Abate_Data
539  548 Noise_Abate_Data.NOISE_SPEED
540  549 Noise_Abate_Data.Noise_Speed_Val
541  550 Noise_Abate_Data.Noise_End_Alt
542  551 Noise_Abate_Data.Default_Noise_Spd
543  552 Noise_Abate_Data.Default_Noise_Spd_Val
544  553 Noise_Abate_Data.Noise_Thrust
545  554 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).NOISE_SPEED
546  555 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val
547  556 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
548   557 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Default_Noise_Spd
549   558 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Default_Noise_Spd_Val
550   559 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Thrust
551   560 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.PRIM_Voted_Inertial_Vert_Speed
552   561 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
553   562 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
554   563 Perf_Background_Dpkg.Psorgalt
555   564 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
556   565 Perf_Background_Dpkg.Flex_Isadev.Data
557   566 Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude
558   567 Curacalt
559   568 Engine_Out_I
560   569 Guid_Ext_Dpkg.Noise_Thrust_Target
561   570 Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target
562   571 Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.valid
563   572 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
564   573 Guid_Ext_Dpkg.Noise_Thrust_Target.Valid
565   574 Perf_Background_Dpkg.Noise_Data.Tspd
566   575 Perf_Background_Dpkg.Noise_Data.Ramping
567   576 Perf_Background_Dpkg.Noise_Data.Tspd.Data
568   577 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
569   578 Perf_Background_Dpkg.Noise_Data.Altitude.Data
570   579 Perf_Background_Dpkg.Noise_Data.Speed.Data
571   580 Thredalt.Data(Fprequestrec_Types.Takeoff).Altitude
572   581 Rwy_Temp
573   582 Cdk_Entry_Tpkg.Drt1
574   583 Perf_Background_Dpkg.Noise_Data.Thrust
575   584 Drtnone
576   585 Maxclb
577   586 Navigation_Data.Aircraft_Altitude
578   587 Perf_Dpkg.Pshmdeleted
579   588 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
580   589 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
581   590 Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes
582   591 Perf_Background_Dpkg.Pcacposn.Data.Lat
583   592 Perf_Background_Dpkg.Pcacposn.Data.Lon
584   593 Perf_Background_Dpkg.Pcacposn.Valid
585   594 Perf_Background_Dpkg.Pstruetrack
586   595 Perf_Background_Dpkg.Pswindbrg
587   596 Perf_Background_Dpkg.Pswindmag
588   597 Perf_Background_Dpkg.Pswindval
589   598 Fmcs_Partition_Data_Pkg.Ops_Time.Hour
590   599 Fmcs_Partition_Data_Pkg.Ops_Time.Minute
591   600 Fmcs_Partition_Data_Pkg.Ops_Time.Second
```

```
  592    601 Airborne_Dat
  593    602 Perf_Dpkg.Psnumengout
  594    603 Perf_Background_Dpkg.Psvgonpath
  595    604 Perf_Background_Dpkg.Pscrzalt.data
  596    605 Perf_Background_Dpkg.Psfinaldes
  597    606 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas
  598    607 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt
  599    608 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type
  600    609 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident
  601    610 Perf_Background_Dpkg.Speed_Annunciation.Cas
  602    611 Perf_Background_Dpkg.Speed_Annunciation.Alt
  603    612 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type
  604    613 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident
  605    614 Vg_Ext_Tpkg.Clb_Spd_Lim
  606    615 Vg_Ext_Tpkg.Des_Spd_Lim
  607    616 Vg_Ext_Tpkg.Invalid
  608    617 Computoldtgt
  609    618 Curspdsval
  610    619 Perf_Background_Dpkg.Psfirstpass
  611    620 Perf_Background_Dpkg.Psonofrstpas
  612    621 Perf_Background_Dpkg.Psftpbwritok
  613    622 Perf_Background_Dpkg.Psvsact
  614    623 Perf_Background_Dpkg.Psfpaact
  615    624 Perf_Background_Dpkg.Pslvlatbcalt
  616    625 Perf_Integration_Dpkg.Pslvlblwpth
  617    626 Perf_Background_Dpkg.Psfi_Possble
  618    627 Perf_Background_Dpkg.On_Icao_Leg_Decel
  619    628 Perf_Integration_Dpkg.Pcoldwspdchg
  620    629 Get_Maxop_Delta_Called
  621    630 Get_Def_Thrust_Reduction_Alt_Called
  622    631 Get_Cruise_Alt_Called
  623    632 Get_Ac_Config_Called
  624    633 Icaolimited
  625    634 Returntoecon
  626    635 Perf_Background_Dpkg.Psacaltv
  627    636 Perf_Background_Dpkg.Pstruetrkv
  628    637 Perf_Background_Dpkg.Psvgrnd
  629    638 Perf_Background_Dpkg.Psvgrndval
  630    639 Eng_Healthy1_Inboard
  631    640 Eng_Healthy1_Outboard
  632    641 Eng_Healthy2_Inboard
  633    642 Eng_Healthy2_Outboard
  634    643 Tla_Ecu1_Inboard.Data
  635    644 Tla_Ecu1_Inboard.Valid
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
 636   645 Tla_Ecu1_Outboard.Data
 637   646 Tla_Ecu1_Outboard.Valid
 638   647 Tla_Ecu2_Inboard.Data
 639   648 Tla_Ecu2_Inboard.Valid
 640   649 Tla_Ecu2_Outboard.Data
 641   650 Tla_Ecu2_Outboard.Valid
 642   651 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.PRIM_Voted_Inertial_Vert_Speed
 643   652 Perf_Dpkg.Pcdelspdrec.Predicted
 644   653 Perf_Background_Dpkg.Pcoldeconcas.Valid
 645   654 Perf_Background_Dpkg.Vman_Fe.Data
 646   655 Perf_Background_Dpkg.Vman_Fe.Valid
 647   656 Adc_In_Range
 648   657 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
 649   658 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
 650   659 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
 651   660
 652   661 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side1
 653   662 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side2
 654   663 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side1
 655   664 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side2
 656   665
 657   666 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Mach_Target
 658   667 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
 659   668 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
 660   669 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
 661   670 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
 662   671 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target
 663   672 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active
 664   673 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target
 665   674 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target
 666   675 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Mach_Target
 667   676 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Speed_Target
 668   677 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target
 669   678 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
 670   679 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.PRIM_Cas_Side1
 671   680 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.PRIM_Cas_Side2
 672   681 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engine_Healthy_1_Inboard
 673   682 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.FRAME_40_Disc_Word_5
 674   683 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engine_Healthy_2_Inboard
 675   684 Perf_Background_Dpkg.Pcpredcount()
 676   685 Perf_Dpkg.Psfrstactprd
 677   686 Perf_Background_Dpkg.Psfpatgt
 678   687 Machmode
 679   688 Perf_Background_Dpkg.Pcmanspd.Speed.CAS
 680   689 Perf_Background_Dpkg.Pcmanspd.CASVALID
 681   690 Perf_Background_Dpkg.Pcmanspd.Speed.MACH
 682   691 Perf_Background_Dpkg.Pcmanspd.MACHVALID
 683   692 Perf_Background_Dpkg.Pccuraltcstr.Data
 684   693 Perf_Background_Dpkg.Pccuraltcstr.Legidx
 685   694 Perf_Background_Dpkg.Pccuraltcstr.Lgidval
 686   695 Perf_Background_Dpkg.Pccuraltcstr.Usevga
 687   696 Perf_Background_Dpkg.Pccuraltcstr.Vgaidx
 688   697 Perf_Background_Dpkg.Pcprebcalt.Data
 689   698 Perf_Background_Dpkg.Pc3rdalt.Data
 690   699 Perf_Background_Dpkg.Pc3rdalt.Valid
 691   700 Perf_Background_Dpkg.Pslcautoctl
 692   701 Perf_Background_Dpkg.Vert_Auto_Mode
 693   702 Perf_Background_Dpkg.Psgrndotdes
 694   703 Perf_Background_Dpkg.Psdestqnh.Valid
 695   704 Perf_Background_Dpkg.Pcdestglidx
 696   705 Perf_Background_Dpkg.Psdestqnh.Data
 697   706 Perf_Background_Dpkg.Pcvertmode
 698   707 Perf_Background_Dpkg.Pcspdtgttag
 699   708 Perf_Background_Dpkg.Psspdtarget
 700   709 Perf_Int_Base_Tpkg.Openclb
 701   710 Perf_Int_Base_Tpkg.Econo
 702   711 Perf_Integration_Dpkg.Psvstgt
 703   712 Perf_Dpkg.Pcfirstpred()
 704   713 Guid_Spds_Dpkg.Vc3prtlimcas
 705   714 Perf_Background_Dpkg.Psrtrntocas
 706   715 Perf_Background_Dpkg.Pslimited
 707   716 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
 708   717 Perf_Background_Dpkg.Pcspdchgtgt.Apply
 709   718 Perf_Background_Dpkg.Lim_Max_Op_Cas
 710   719 Perf_Background_Dpkg.Lim_Max_Op_Mach
 711   720 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec
 712   721 Curcas
 713   722 Curmach
 714   723 Xoveralt
 715   724 Puxoveralt_Exec
 716   725 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt
 717   726 Perf_Background_Dpkg.Trip_Data.FUEL
 718   727 Perf_Background_Dpkg.Trip_Data.TIME
 719   728 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Iienabled
 720   729 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Prenabled
 721   730 Data_Storage.Pctriptime(ACTIVE).FUEL
 722   731 Data_Storage.Pctriptime(ACTIVE).TIME
 723   732 Perf_Background_Dpkg.Psisadev
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
 724   733 Guid_Ext_Dpkg.Va3lcautoctl
 725   734 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
 726   735 Guid_Ext_Dpkg.Galxtk
 727   736 Guid_Checkpoint_Resynch_Dpkg.Vc3Cstrduald.Isbdatablock.Cstraltlim
 728   737 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active
 729   738 Perf_Background_Dpkg.Ac_Crosstrack_Error
 730   739 Perf_Background_Dpkg.Early_Descent_From_Level
 731   740 Perf_Background_Dpkg.Altholdmode
 732   741 Perf_Background_Dpkg.Pcoptinitspd.Clb.Cas
 733   742 Perf_Background_Dpkg.Pcoptinitspd.Clb.Mach
 734   743 Perf_Background_Dpkg.Psecncrzmach
 735   744 Perf_Background_Dpkg.Psecncrzcas
 736   745 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
 737   746 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
 738   747 Perf_Background_Dpkg.Pspressalt
 739   748 Perf_Background_Dpkg.Pscurtasvalid
 740   749
 741   750 Perf_Background_Dpkg.Psconsider_Hm
 742   751 Perf_Background_Dpkg.Pshxpxdecel
 743   752 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm
 744   753 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Mach
 745   754 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Mach
 746   755 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Airspeed
 747   756 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Airspeed
 748   757 Fmcs_Base_Types.Cas
 749   758 Perf_Background_Dpkg.Psfcuspd
 750   759 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid
 751   760 Perf_Background_Dpkg.Use_Clb_Autodrt
 752   761 Cdk_Vert_Dpkg:body.Fpln_Data().Autoderated_Climb_Mode
 753   762 Cdk_Entry_Tpkg.Auto_Derate
 754   763 Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
 755   764 Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Woendalt
 756   765 Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Wos
 757   766 Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Dtflex
 758   767 Perf_Background_Dpkg.Climb_Autodrt.Delta_T_Flex
 759   768 Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_End_Alt
 760   769 Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_Slope
 761   770 Cdk_Entry_Tpkg.Clb
 762   771 Call_Auto_Derated_Climb_Mode
 763   772 Call_Climb_Autodrt
 764   773 Perf_Background_Dpkg.Psseqtoc
 765   774 Fuel_Plan_Stage2
 766   775 Perf_Background_Dpkg.Psv2plus10
 767   776 Perf_Background_Dpkg.Psdeslimspdchg
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
 768   777 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
 769   778 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included
 770   779 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Spd
 771   780 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
 772   781 Perf_Int_Base_Tpkg.Is_Active
 773   782
 774   783 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
 775   784 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
 776   785 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
 777   786 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
 778   787 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
 779   788 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Ident
 780   789 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.CAS
 781   790 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.REASON
 782   791 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.AIRBRAKE
 783   792 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.SPARE1
 784   793 Perf_Integration_Dpkg.Pcspdchgident
 785   794 Perf_Background_Dpkg.Pcspdchgtgt.Ident
 786   795 Perf_Background_Dpkg.Pcspdchgtgt.CAS
 787   796 Perf_Background_Dpkg.Pcspdchgtgt.REASON
 788   797 Perf_Background_Dpkg.Pcspdchgtgt.AIRBRAKE
 789   798 Perf_Background_Dpkg.Pcspdchgtgt.SPARE1
 790   799
 791   800 CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt
 792   801 Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt
 793   802 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
 794   803 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
 795   804 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
 796   805 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas
 797   806 Guid_Spds_Dpkg.Vc3curspds.Fltphase
 798   807 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_valid
 799   808 Perf_Background_Dpkg.QNH_QFE_Selected
 800   809 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL
 801   810 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL
 802   811 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data
 803   812
 804   813 Perf_Background_Dpkg.Alt_Curr_Baro.Valid
 805   814 Perf_Background_Dpkg.Secn_Fpln_Itin = false
 806   815 Perf_Background_Dpkg.What_If_Preds_Enabled()
 807   816 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt().Valid
 808   817 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt().Valid
 809   818 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid
 810   819 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid
 811   820 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt().Data
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
812  821 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt().Data
813  822 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data
814  823 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data
815  824 Perf_Background_Dpkg.What_If_Data.Pseudo_Button
816  825 Perf_Int_Base_Tpkg.Copy_From_Active
817  826 Navigation_Data.Aircraft_Altitude_Valid
818  827 CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Valid
819  828 CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Data
820  829 Perf_Background_Dpkg.Alt_Curr_Baro.Data
821  830 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data
822  831 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid
823  832 Guid_Spds_Dpkg.Pfd_Display_Speed.Valid
824  833 Guid_Spds_Dpkg.Pfd_Display_Speed.Data
825  834 Perf_Background_Dpkg.Pfd_Display_Speed.Valid
826  835 Perf_Background_Dpkg.Pfd_Display_Speed.Data
827  836 Perf_Background_Dpkg.Clralt_Below_Des_Spd_Lim_Decel_Start
828  837 Perf_Background_Dpkg.Below_Path_Pred.Below_DSL_VS_Target
829  838
830  839 Perf_Dpkg.Potential_To_Kinetic_Share
831  840 Perf_Dpkg.Des_Potential_To_Kinetic_Share
832  841 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass
833  842 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid
834  843 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data
835  844 Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred
836  845 Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred
837  846 Perf_Config_Dpkg.Fidconfidx
838  847 Perf_Config_Dpkg.Clean
839  848 Perf_Background_Dpkg.Pcconfig
840  849 Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd
841  850 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment
842  851 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol
843  852 Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance
844  853 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds().Cas
845  854 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds().Mach
846  855 Perf_Background_Dpkg.Pcsavstepcas()
847  856 Perf_Background_Dpkg.Pcsavstepmac()
848  857 Perf_Background_Dpkg.Psinstep
849  858 Perf_Background_Dpkg.Psstepcas
850  859 Perf_Background_Dpkg.Psstepmach
851  860 Perf_Background_Dpkg.Psthredalt
852  861 Perf_Background_Dpkg.Psdesthrdalt
853  862 Perf_Background_Dpkg.Tdp_Level_Seg_At_Or_Below_Clralt
854  863 Perf_Database_Dpkg.Psvmo
855  864 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Def_Thrust_Reduction_Alt_Arr().Data().Altitude
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
856   865
857   866 Perf_Get_State_Pkg_Get_State_called
858   867 Fpln_Ext_Dpkg_Get_Flight_Phase_called
859   868 Prf_Aeroeng_Pkg_Get_Num_Eng_Out_called
860   869 Fpln_Ext_Dpkg_Get_Cruise_Alt_called
861   870 Prf_Acstate_Pkg_Get_Ac_Config_called
862   871
863   872 Perf_Background_Dpkg.Active_Start_Predcount
864   873
      874 Guid_Ext_Dpkg.Va3pathref
      875
865   876 END_SUT_VARS
866   877
867   878 DEFAULTS
868   879
869   880 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt_Status := Takeoff_Alt_Types.Active
870   881 Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
871   882 Perf_Background_Dpkg.Noise_Data.Speed.Valid := False
872   883 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai := False
873   884 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai   := False
874   885 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond  := False
875   886 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1 := system'address
876   887 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.FRAME_120_Disc_Word_3.Final_Descent_Mode_Active := T
          » rue
877   888 Io_Adc_Sel_Pkg.The_Selected_Adc := system'address
878   889 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Sat := True
879   890 Io_IRS_Sel_Pkg.The_Selected_IRS := system'address
880   891 Io_IRS_Sel_Pkg.The_Selected_IRS.all.Io_IRS_MSG2_Validity_Rec.Inertial_Vert_Speed := True
881   892 Perf_Background_Dpkg.Pcactorsec := Active
882   893 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec := False
883   894 Perf_Background_Dpkg.Psdeslimspdchg := False
884   895 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_valid := true
885   896 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=false
886   897 CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt := 100.0
887   898 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach := 0.0
888   899 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas :=0.0
889   900 END_DEFAULTS
890   901
891   902 -- NOTES: (1)As per anchor PERF_SDD_3746_INT, The current Step altitude is initialized to the current Cruise altitude
          » after
892   903 --            copying the trip data. This is common to all Test Cases.
893   904
894   905 *****************************************************************
895   906
```

```
 896   907 TESTID: 1
 897   908
 898   909     Verify that if there is no engine out, engine-out predictions flag is set to ENGOUTNOTVAL.
 899   910     PERF_SDD_0412_INT, PERF_SDD_3317_INT, PERF_SDD_0417_INT
 900   911     If the current itinerary is associated with the Is_Active flight plan, or with a secondary flight plan copied
 901   912     from the Is_Active, a variety of global data are retrieved which are common to both the Is_Active and secondary
 902   913     predictions processes.
 903   914
 904   915     TO verify when the working flight plan is Is_Active , a variety of following global data  be retrieved
 905   916      - A/C altitude and its validity
 906   917      - A/C position
 907   918      - A/C track and its validity
 908   919      - A/C ground speed and its validity
 909   920      - Wind bearing
 910   921      - Wind magnitude
 911   922      - Wind validity
 912   923      - Health status of Engines (Inboard and Outboard Engines of Captain and FO)
 913   924      - Throttle lever angle (Inboard and Outboard Engines of Captain and FO)
 914   925      - A/C flightphase
 915   926      - Clock time
 916   927      - FE maneuver speed and validity
 917   928      - Airborne flag
 918   929        when Io_Fms_Aircraft_State_Dpkg.Is_Airborne is true
 919   930        and Perf_Background_Dpkg.Pcfltphase is not Preflight and Done;
 920   931      - Lateral auto mode flag
 921   932      - Current aircraft cross track error from guidance.
 922   933      - Level change auto control mode flag
 923   934      - Vertical auto mode flag
 924   935      - Third altitude from guidance
 925   936      - Current altitude constraint management related data(Pccuraltcstr) from guidance
 926   937      - Previous captured barometric altitude related data (Pcprebcalt) from guidance
 927   938      - A/C is descending from level segment or alt constraint (Early_Descent_From_Level) from guidance
 928   939      - Engine-out flag
 929   940      - Engines off status
 930   941      - Number of engines out via Prf_Aeroeng_Pkg.Get_Num_Eng_Out
 931   942      -when Perf_Background_Dpkg.Pcpathref is not Onpath the descent path is not be captured
 932   943      - Cruise altitude from Fpln_Ext_Dpkg.Get_Cruise_Alt
 933   944      - when Sel_Src_Inertial_Vert_Speed is valid, A/C inertial vertical speed is Io_Common_Irs_Dpkg.Data
 934   945      - Speed mode from Guid_Ext_Dpkg.Va3vertmde
 935   946      - Active Speed Restriction Annunciation from Guid_Ext_Dpkg.Active_Speed_Restriction
 936   947      -  when Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Activeis valid, Altitude Hold mode flag status from FMGC via th
           » e interface
 937   948      - Final descent mode flag from FMGC armed or active status via the interfaces
 938   949        Io_Fg_Fm_Internal_Dpkg.Final_Descent_Mode_Active.Data and
 939   950         Io_Fg_Fm_Internal_Dpkg.Final_Descent_Mode_Armed.Data
 940   951      - A/C configuration via Prf_Acstate_Pkg.Get_Ac_Config
 941   952      - A/C airbrake extension indicator to zero airbrake
 942   953      - Step climb & step descent active flags (Psstpclbact & Psstpdesact) are set from guidance.
 943   954      -  when the Engine out status and the VG indicator that Green-Dot Speed is not latched,
 944   955      then the flag indicating that VG is using latched Green-Dot descent speed is not set
 945   956      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
 946   957      PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
 947   958      PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
 948   959
 949   960     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
 950   961     working flight plan.
 951   962     PERF_SDD_4328 (PERF_SRD_10166_INT)
 952   963
 953   964     If Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is currently in
           »  Noise Ramp
 954   965     segment and no engine out condition exist then the following noise data shall be set up for background's usage:
 955   966     PERF_SDD_5607_INT
 956   967
 957   968     The validity of Perf_Background_Dpkg.Noise_Data.Altitude shall be set to valid and its value is set to Noise_End_A
           » lt obtained
 958   969     from FPLN.
 959   970     PERF_SDD_5608_INT
 960   971
 961   972     Here, Cdk_Vert_Dpkg.Engine_Out indicates that there is no Engine Out.
 962   973
 963   974     If Noise Speed (Noise_Speed_Val) from FPLN is valid then the validity of Perf_Background_Dpkg.Noise_Data.Speed sha
           » ll be set to
 964   975     valid and its value is set to Noise_Speed obtained from FPLN, otherwise its validity is set to invalid.
 965   976     PERF_SDD_5610_INT  (In this TC, Noise Speed (Noise_Speed_Val) from FPLN is valid)
 966   977
 967   978     The Perf_Background_Dpkg.Noise_Data.Thrust shall be set to Noise_Thrust obtained from FPLN.
 968   979     PERF_SDD_5609_INT
 969   980
 970   981     If Noise TSPD from FPLN is valid than the validity of Perf_Background_Dpkg.Noise_Data.TSPD shall be set to valid a
           » nd its
 971   982     value is set to Noise_TSPD obtained from FPLN, otherwise its validity is set to Invalid.
 972   983     PERF_SDD_5611_INT (Here Noise TSPD from FPLN is invalid.)
 973   984
 974   985    *If  1. the Flex_Takeoff_Temperature validity is true,
 975   986        *2. the aircraft is in Climb or below, ("below" in this testcase)
 976   987        *3. the aircraft altitude is at or below thrust reduction altitude("at" in this testcase, considering tolerance
           »  of 1.0 foot)
 977   988           and
```

```
    4. there is not an engine out condition
  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
  where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C.
  *If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
      Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
   Else
      Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
  Otherwise the Flex_Isadev value will be set to zero.
PERF_SDD_5585(PERF_SRD_12437)

The airborne flag(Psairborne) shall be set when
    - the Is_Airborne flag from IO is valid and
    - the current flight phase is not in preflight or done.
PERF_SDD_07495_INT

The ADC/FG input data validity(Adc_Fg_Valid) shall be determined from the validity of
  - Static Air Temperature
  - Pressure Altitude
  - CAS, TAS, Mach (only if the aircraft is airborne) and
For the valid ADC/FG input data, the following data are retrieved from IO
  - A/C Pressure altitude
  - A/C CAS
  - A/C Mach
  - A/C TAS
  - A/C Current TAS Validity
Also if the baro corrected altitude is valid, then the current baro corrected altitude is retrieved from IO.
PERF_SDD_07496_INT

The ADC range flag shall be set to true only if all of the following conditions are valid
  - the aircraft pressure altitude is from -2000.00 ft to 50,000.00 ft.
  - the aircraft static air temperature is from -99.00 to 80.00 Celcius
  - the aircraft is airborne and
  - the aircraft CAS is from 0.0 kts to 450.0 kts.
  - the airacrft Mach is from 0.0 to 1.0 mach
  - the aircraft TAS is at or below 599.00 kts
  - the aircraft TAS is at or above 50.0 kts or the aircraft flight phase being takeoff or
    before with aircraft TAS is at or above 0.0 kts
PERF_SDD_07497_INT

The ADC/FG input data validity shall be set based on the validity of ADC range flag.
PERF_SDD_07498_INT

The predicted data of delta speed record shall be reset to false.
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1022  1033     The previous integration interval econ cas speed is invalidated.
1023  1034     PERF_SDD_07499_INT
1024  1035
1025  1036
1026  1037 --INPUTS
1027  1038 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
1028  1039 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
1029  1040 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
1030  1041 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
1031  1042 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
1032  1043 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
1033  1044 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
1034  1045 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
1035  1046 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
1036  1047 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
1037  1048
1038  1049 Perf_Dpkg.Min_Gwt := 100.0
1039  1050 Perf_Dpkg.Max_Gwt := 400.0
1040  1051 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
1041  1052 Perf_Background_Dpkg.Ats_Enable := True
1042  1053 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Takeoff
1043  1054 Perf_Database_Dpkg.Psmmo := 0.45
1044  1055 Perf_Background_Dpkg.Pszfw := 300.0
1045  1056 Perf_Background_Dpkg.Psblockfuel := 50.0
1046  1057 Perf_Background_Dpkg.Pstaxifuel := 25.0
1047  1058 Perf_Background_Dpkg.Psairborne := False
1048  1059 Perf_Background_Dpkg.Psautolat := True
1049  1060 Guid_Ext_Dpkg.Gcxxlatautoc := False
1050  1061 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
1051  1062 Perf_Background_Dpkg.Psengout := True
1052  1063 Cdk_Vert_Dpkg:Body.Engine_Out_I := False
1053  1064 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
1054  1065 Perf_Dpkg.Repredict_Hm_Decel := True
1055  1066 Perf_Background_DPkg.Pshmdecel := True
1056  1067 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
1057  1068 Perf_Ads_Dpkg.Fi_Enabled := False
1058  1069 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
1059  1070 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
1060  1071 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
1061  1072 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
1062  1073 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
1063  1074 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
1064  1075 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
1065  1076 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1066  1077 Perf_Background_Dpkg.Psappspdlat := True
1067  1078 Perf_Dpkg.Pcengoutprds := Altpln
1068  1079 Perf_Background_Dpkg.Pcpathref := Onpath
1069  1080 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
1070  1081 Perf_Background_DPkg.Pscurcas := 5.0
1071  1082 Perf_Background_DPkg.Pscurmach := 5.0
1072  1083 Perf_Background_DPkg.Pscurtas := 5.0
1073  1084 Perf_Background_Dpkg.Pcitin.Itinerary := No_Itinerary
1074  1085 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
1075  1086 Perf_Background_Dpkg.Pstogwtval := False
1076  1087 Perf_Background_Dpkg.Pstogwt := 50.0
1077  1088 Perf_Background_Dpkg.Pcgwind := Invalid
1078  1089 Perf_Background_Dpkg.Psgw := 0.0
1079  1090 Perf_Dpkg.Gross_Weight.Status := Valid
1080  1091 Perf_Dpkg.Gross_Weight.Data := 150.0
1081  1092 Perf_Integration_DPkg.Pcairbrakes := Fullab
1082  1093 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
1083  1094 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
1084  1095 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
1085  1096 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
1086  1097 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
1087  1098 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
1088  1099 Perf_Background_Dpkg.Psstpclbact := True
1089  1100 Perf_Background_Dpkg.Psstpdesact := True
1090  1101 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
1091  1102 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
1092  1103 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
1093  1104 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
1094  1105 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
1095  1106 Perf_Background_Dpkg.Pcprebcalt.Valid := True
1096  1107 Perf_Background_Dpkg.Pcgmttime.Hour := 2
1097  1108 Perf_Background_Dpkg.Pcgmttime.Minute := 2
1098  1109 Perf_Background_Dpkg.Pcgmttime.Second := 2
1099  1110 Perf_Background_Dpkg.Psinertvs := 5.0
1100  1111 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
1101  1112 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
1102  1113 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
1103  1114 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
1104  1115 Perf_Ads_Dpkg.Pr_Enabled := False
1105  1116 ATC_DISCRETES_PKG:body.Adson_Flag := False
1106  1117 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
1107  1118 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
1108  1119 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
1109  1120 ^Noise_Speed_Val := True
```

```
1110  1121 ^Noise_TSPD.valid := True
1111  1122 ^Noise_TSPD.Data  := 150.0
1112  1123 ^Noise_End_Alt    := 300.0
1113  1124 ^Noise_Speed      := 250.0
1114  1125 ^Noise_Thrust     := Maxclb
1115  1126 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start  := True
1116  1127 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
1117  1128 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
1118  1129 Perf_Background_Dpkg.Psorgalt := 36080.0
1119  1130 Perf_Background_Dpkg.Noise_Data.Altitude.Data := 0.0
1120  1131 Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
1121  1132 Perf_Background_Dpkg.Noise_Data.Speed.Data := 0.0
1122  1133 Perf_Background_Dpkg.Noise_Data.Speed.Valid := False
1123  1134 Perf_Background_Dpkg.Noise_Data.Tspd.Data  := 0.0
1124  1135 Perf_Background_Dpkg.Noise_Data.Tspd.Valid := False
1125  1136 Perf_Background_Dpkg.Noise_Data.Thrust     := Drtnone
1126  1137
1127  1138 Perf_Background_Dpkg.Pcfltphase          := Cruise
1128  1139 Perf_Background_Dpkg.Psacalt             := 50.0
1129  1140 Perf_Background_Dpkg.Psacaltv            := False
1130  1141 Perf_Background_Dpkg.Pstruetrkv          := False
1131  1142 Perf_Background_Dpkg.Psvgrnd             := 0.0
1132  1143 Perf_Background_Dpkg.Psvgrndval          := False
1133  1144 Perf_Background_Dpkg.Pcacposn.Data.Lat   := 100.0
1134  1145 Perf_Background_Dpkg.Pcacposn.Data.Lon   := 100.0
1135  1146 Perf_Background_Dpkg.Pcacposn.Valid      := false
1136  1147 Perf_Background_Dpkg.Pstruetrack         := 0.2
1137  1148 Perf_Background_Dpkg.Pswindbrg           := 150.0
1138  1149 Perf_Background_Dpkg.Pswindmag           := 130.0
1139  1150 Perf_Background_Dpkg.Pswindval           := false
1140  1151 Fmcs_Partition_Data_Pkg.Ops_Time.Hour    := 1
1141  1152 Fmcs_Partition_Data_Pkg.Ops_Time.Minute  := 1
1142  1153 Fmcs_Partition_Data_Pkg.Ops_Time.Second  := 1
1143  1154 Perf_Dpkg.Psnumengout                    := 1
1144  1155 Perf_Background_Dpkg.Psvgonpath          := true
1145  1156 Perf_Background_Dpkg.Pscrzalt.data       := 10.0
1146  1157 Perf_Background_Dpkg.Pscrzalt.Valid      := false
1147  1158 Perf_Background_Dpkg.Psfinaldes          := false
1148  1159 Perf_Background_Dpkg.Pcspeedmode         := Perf_Ext_Tpkg.Vmecon
1149  1160 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas := 230.0
1150  1161 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt := 15000.0
1151  1162 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type := Vg_Ext_Tpkg.Clb_Spd_Lim
1152  1163 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident      := "ABCD   "
1153  1164 Perf_Background_Dpkg.Pcactorsec                       := Active
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
Perf_Background_Dpkg.Alt_Curr_Baro.Valid := False
Perf_Background_Dpkg.Alt_Curr_Baro.Data := 0.00

--update to Get a copy of the current A/C cross track error
Guid_Ext_Dpkg.Galxtk := 2.49
--update for PERF_SDD_0409
Guid_Checkpoint_Resynch_Dpkg.Vc3Cstrduald.Isbdatablock.Cstraltlim := true
--Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Active.Is_Valid & data
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3  := true
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active  :=
» true
--PERF_SDD_07496_INT
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 2100
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas := True

-- Reset Output
Perf_Background_Dpkg.Speed_Annunciation.Cas             := 0.0
Perf_Background_Dpkg.Speed_Annunciation.Alt             := 0.0
Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  := Vg_Ext_Tpkg.Invalid
Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       := "       "
Perf_Background_Dpkg.Flex_Isadev.Data := 5.0
Perf_Background_Dpkg.Ac_Crosstrack_Error                := 0.0
Perf_Background_Dpkg.Early_Descent_From_Level           := false
Perf_Background_Dpkg.Altholdmode                        := false
CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Data := 23.20
Perf_Background_Dpkg.Pspressalt                         := 0.0
Perf_Background_Dpkg.Pscurtasvalid                      := false

#define Get_Maxop_Delta_Called := False
#define Get_Def_Thrust_Reduction_Alt_Called := False
#define Get_Cruise_Alt_Called := False
#define Get_Ac_Config_Called := False

#sba prf_bkgnd_pkg.get_bk_Data after_elaboration
# go
Computoldtgt := True
Curspdsval := False
Perf_Background_Dpkg.Psfirstpass := False
Perf_Background_Dpkg.Psonofrstpas := False
Perf_Background_Dpkg.Psftpbwritok := False
Perf_Background_Dpkg.Psvsact := True
Perf_Background_Dpkg.Psfpaact := True
Perf_Background_Dpkg.Pslvlatbcalt := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1197  1208 Perf_Integration_Dpkg.Pslvlblwpth := True
1198  1209 Perf_Background_Dpkg.Psfi_Possble := True
1199  1210 Perf_Background_Dpkg.On_Icao_Leg_Decel := True
1200  1211 Perf_Background_Dpkg.Psignorehm := True
1201  1212 Perf_Integration_Dpkg.Pcoldwspdchg := Icaolimited
1202  1213 Perf_Background_Dpkg.Adc_Fg_Valid  := False
1203  1214 Perf_Background_Dpkg.Psenginesoff := True
1204  1215 Perf_Dpkg.Pcdelspdrec.Predicted   := True
1205  1216 Perf_Background_Dpkg.Pcoldeconcas.Valid := True
1206  1217
1207  1218 #Perf_Dpkg.takeoff_gwt.valid := True
1208  1219 #Perf_Dpkg.takeoff_gwt.data := 400.0
1209  1220 #DELB/ALL
1210  1221
1211  1222 #sba Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt after_elab begin
1212  1223 #define Get_Def_Thrust_Reduction_Alt_Called   := True
1213  1224 #go
1214  1225 #end
1215  1226
1216       ~~#sba prf_bkgnd_pkg.get_bk_Data #553~~
      1227 #sba prf_bkgnd_pkg.get_bk_Data #559
1217  1228 #go
1218  1229 Thredalt.Data(Fprequestrec_Types.Takeoff).Altitude := 10001
1219  1230 #DELB/ALL
1220  1231
1221       ~~#sba prf_bkgnd_pkg.get_bk_Data #575~~
      1232 #sba prf_bkgnd_pkg.get_bk_Data #581
1222  1233 #go
1223  1234 Computoldtgt = False
1224  1235 Curspdsval = True
1225  1236 Perf_Background_Dpkg.Psfirstpass = True
1226  1237 Perf_Background_Dpkg.Psonofrstpas = True
1227  1238 Perf_Background_Dpkg.Psftpbwritok = True
1228  1239 Perf_Background_Dpkg.Psvsact = False
1229  1240 Perf_Background_Dpkg.Psfpaact = False
1230  1241 Perf_Background_Dpkg.Pslvlatbcalt = False
1231  1242 Perf_Integration_Dpkg.Pslvlblwpth = False
1232  1243 Perf_Background_Dpkg.Psfi_Possble = False
1233  1244 Perf_Background_Dpkg.On_Icao_Leg_Decel = False
1234  1245 Perf_Background_Dpkg.Psignorehm = False
1235  1246 Perf_Integration_Dpkg.Pcoldwspdchg = Returntoecon
1236  1247 #DELB/ALL
1237  1248
1238  1249 #set breakpoint STUBED at Perf_Get_State_Pkg.Get_State before_end
```

1239	1250	`#go`
1240	1251	`Perf_Background_Dpkg.Psacalt           = 100.0`
1241	1252	`Perf_Background_Dpkg.Psacaltv          = True`
1242	1253	`Perf_Background_Dpkg.Pcacposn.Data.Lat = 150.0`
1243	1254	`Perf_Background_Dpkg.Pcacposn.Data.Lon = 120.0`
1244	1255	`Perf_Background_Dpkg.Pcacposn.Valid    = true`
1245	1256	`Perf_Background_Dpkg.Pstruetrack       = 0.1`
1246	1257	`Perf_Background_Dpkg.Pstruetrkv        = True`
1247	1258	`Perf_Background_Dpkg.Pswindbrg         = 200.0`
1248	1259	`Perf_Background_Dpkg.Pswindmag         = 100.0`
1249	1260	`Perf_Background_Dpkg.Pswindval         = true`
1250	1261	`Perf_Background_Dpkg.Psvgrnd           = 1.0`
1251	1262	`Perf_Background_Dpkg.Psvgrndval        = True`
1252	1263	`#delb/all`
1253	1264	
1254		~~`#sba prf_bkgnd_pkg.get_bk_Data  #589`~~
	1265	`#sba prf_bkgnd_pkg.get_bk_Data  #595`
1255	1266	`#go`
1256	1267	`Eng_Healthy1_Inboard            := True`
1257	1268	`Eng_Healthy1_Outboard           := True`
1258	1269	`Eng_Healthy2_Inboard            := True`
1259	1270	`Eng_Healthy2_Outboard           := True`
1260	1271	`Tla_Ecu1_Inboard.Data           := 1.0`
1261	1272	`Tla_Ecu1_Inboard.Valid          := True`
1262	1273	`Tla_Ecu1_Outboard.Data          := 1.0`
1263	1274	`Tla_Ecu1_Outboard.Valid         := True`
1264	1275	`Tla_Ecu2_Inboard.Data           := 1.0`
1265	1276	`Tla_Ecu2_Inboard.Valid          := True`
1266	1277	`Tla_Ecu2_Outboard.Data          := 1.0`
1267	1278	`Tla_Ecu2_Outboard.Valid         := True`
1268		~~`#delba prf_bkgnd_pkg.get_bk_Data  #589`~~
	1279	`#delba prf_bkgnd_pkg.get_bk_Data  #595`
1269	1280	
1270		~~`#sba prf_bkgnd_pkg.get_bk_Data #622`~~
	1281	`#sba prf_bkgnd_pkg.get_bk_Data #628`
1271	1282	`#go`
1272	1283	`Eng_Healthy1_Inboard            = False`
1273	1284	`Eng_Healthy1_Outboard           = True`
1274	1285	`Eng_Healthy2_Inboard            = False`
1275	1286	`Eng_Healthy2_Outboard           = True`
1276	1287	`Tla_Ecu1_Inboard.Data           = 0.0`
1277	1288	`Tla_Ecu1_Inboard.Valid          = False`
1278	1289	`Tla_Ecu1_Outboard.Data          = 0.0`
1279	1290	`Tla_Ecu1_Outboard.Valid         = False`

```
1280  1291 Tla_Ecu2_Inboard.Data          = 0.0
1281  1292 Tla_Ecu2_Inboard.Valid         = False
1282  1293 Tla_Ecu2_Outboard.Data         = 0.0
1283  1294 Tla_Ecu2_Outboard.Valid        = False
1284  1295 Perf_Background_Dpkg.Pcfltphase       = Takeoff
1285  1296 Perf_Background_Dpkg.Pcgmttime.Hour    = 1
1286  1297 Perf_Background_Dpkg.Pcgmttime.Minute  = 1
1287  1298 Perf_Background_Dpkg.Pcgmttime.Second  = 1
1288  1299 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
1289  1300
1290  1301 Perf_Background_Dpkg.Vman_Fe.Data      := 1.0
1291  1302 Perf_Background_Dpkg.Vman_Fe.Valid     := True
1292  1303 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off := False
1293       ~~#delba prf_bkgnd_pkg.get_bk_Data #622~~
      1304 #delba prf_bkgnd_pkg.get_bk_Data #628
1294  1305
1295       ~~#sba PRF_BKGND_PKG.GET_BK_DATA #665 INLINE IO_FMS_AIRCRAFT_STATE_DPKG.IS_AIRBORNE after_elab~~
      1306 #sba PRF_BKGND_PKG.GET_BK_DATA #671 INLINE IO_FMS_AIRCRAFT_STATE_DPKG.IS_AIRBORNE after_elab
1296  1307 #go
1297  1308 Airborne_Dat              := True
1298       ~~#delba PRF_BKGND_PKG.GET_BK_DATA #665 INLINE IO_FMS_AIRCRAFT_STATE_DPKG.IS_AIRBORNE after_elab~~
      1309 #delba PRF_BKGND_PKG.GET_BK_DATA #671 INLINE IO_FMS_AIRCRAFT_STATE_DPKG.IS_AIRBORNE after_elab
1299  1310
1300       ~~#sba prf_bkgnd_pkg.get_bk_Data #682~~
      1311 #sba prf_bkgnd_pkg.get_bk_Data #688
1301  1312 #go
1302  1313 Perf_Background_Dpkg.Vman_Fe.Data      = 0.0
1303  1314 Perf_Background_Dpkg.Vman_Fe.Valid     = False
1304  1315 Perf_Background_Dpkg.Psairborne        = True
1305  1316 Perf_Background_Dpkg.Psautolat         = False
1306  1317 Perf_Background_Dpkg.Psengout          = False
1307  1318 Perf_Background_Dpkg.Psenginesoff      = False
1308       ~~#delba prf_bkgnd_pkg.get_bk_Data #682~~
      1319 #delba prf_bkgnd_pkg.get_bk_Data #688
1309  1320
1310  1321 #sba Fpln_Ext_Dpkg.Get_Cruise_Alt after_elab begin
1311  1322 #define Get_Cruise_Alt_Called   := True
1312  1323 #go
1313  1324 #end
1314  1325
1315       ~~#sba prf_bkgnd_pkg.get_bk_Data #802~~
      1326 #sba prf_bkgnd_pkg.get_bk_Data #809
1316  1327 #go
1317  1328 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Sat      := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1318  1329  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
1319  1330  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := True
1320  1331  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
1321  1332  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
1322  1333  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side1 := True
1323  1334  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side2 := True
1324  1335  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side1 := True
1325  1336  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side2 := True
1326        ~~#delba prf_bkgnd_pkg.get_bk_Data #802~~
      1337  #delba prf_bkgnd_pkg.get_bk_Data #809
1327  1338
1328        ~~#sba prf_bkgnd_pkg.get_bk_Data #826~~
      1339  #sba prf_bkgnd_pkg.get_bk_Data #833
1329  1340  #go
1330  1341  Perf_Background_Dpkg.Adc_Fg_Valid = True
1331        ~~#delba prf_bkgnd_pkg.get_bk_Data #826~~
      1342  #delba prf_bkgnd_pkg.get_bk_Data #833
1332  1343
1333        ~~#sba prf_bkgnd_pkg.get_bk_Data #858~~
      1344  #sba prf_bkgnd_pkg.get_bk_Data #865
1334  1345  #go
1335  1346  Perf_Background_Dpkg.Pspressalt             = 2100.0
1336  1347  Perf_Background_Dpkg.Pscurcas              = 0.0
1337  1348  Perf_Background_Dpkg.Pscurmach             = 0.0
1338  1349  Perf_Background_Dpkg.Pscurtas              = 0.0
1339  1350  Perf_Background_Dpkg.Pscurtasvalid         = True
1340  1351
1341  1352  Perf_Dpkg.Psnumengout                       = 0
1342  1353  Perf_Background_Dpkg.Psvgonpath             = false
1343  1354  Perf_Background_Dpkg.Pscrzalt.data          = 5.0
1344  1355  Perf_Background_Dpkg.Pscrzalt.Valid         = True
1345  1356  Perf_Dpkg.Pcdelspdrec.Predicted             = False
1346  1357  Perf_Background_Dpkg.Pcoldeconcas.Valid     = False
1347  1358  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.PRIM_Voted_Inertial_Vert_Speed  := True
1348  1359  Io_IRS_Sel_Pkg.The_Selected_IRS.all.Io_IRS_MSG2_Validity_Rec.Inertial_Vert_Speed := True
1349  1360  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.PRIM_Voted_Inertial_Vert_Speed := 1.0
1350        ~~#delba prf_bkgnd_pkg.get_bk_Data #858~~
      1361  #delba prf_bkgnd_pkg.get_bk_Data #865
1351  1362
1352        ~~#sba prf_bkgnd_pkg.get_bk_Data #871~~
      1363  #sba prf_bkgnd_pkg.get_bk_Data #878
1353  1364  #go
1354  1365  Adc_In_Range                         = True
1355  1366  Perf_Background_Dpkg.Adc_Fg_Valid    = True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

1356	1367	Perf_Background_Dpkg.Psinertvs = 1.0
1357		~~#delba prf_bkgnd_pkg.get_bk_Data #871~~
	1368	#delba prf_bkgnd_pkg.get_bk_Data #878
1358	1369	
1359	1370	#sba Prf_Acstate_Pkg.Get_Ac_Config after_elab begin
1360	1371	#define Get_Ac_Config_Called := True
1361	1372	#go
1362	1373	#end
1363	1374	
1364		~~#sba prf_bkgnd_pkg.get_bk_Data #1032~~
	1375	#sba prf_bkgnd_pkg.get_bk_Data #1039
1365	1376	#go
1366	1377	Perf_Background_Dpkg.Pcspeedmode = Perf_Ext_Tpkg.Vmspd
1367	1378	Perf_Background_Dpkg.Psfinaldes = true
1368	1379	Perf_Background_Dpkg.Pcacconfig = 0
1369	1380	Perf_Background_Dpkg.Psgrndotdes := True
1370	1381	Perf_Background_Dpkg.Psstpclbact := True
1371	1382	Perf_Background_Dpkg.Psstpdesact := True
1372	1383	Perf_Background_Dpkg.Psengout := False
1373	1384	Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes := False
1374	1385	Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
1375	1386	Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
1376		~~#delba prf_bkgnd_pkg.get_bk_Data #1032~~
	1387	#delba prf_bkgnd_pkg.get_bk_Data #1039
1377	1388	
1378		~~#sba prf_bkgnd_pkg.get_bk_Data #1101~~
	1389	#sba prf_bkgnd_pkg.get_bk_Data #1108
1379	1390	#go
1380	1391	Perf_Integration_Dpkg.Pcairbrakes = Zeroab
1381	1392	Perf_Background_Dpkg.Psgrndotdes = False
1382	1393	Perf_Background_Dpkg.Psstpclbact = False
1383	1394	Perf_Background_Dpkg.Psstpdesact = False
1384		~~#delba prf_bkgnd_pkg.get_bk_Data #1101~~
	1395	#delba prf_bkgnd_pkg.get_bk_Data #1108
1385	1396	
1386		~~#sba prf_bkgnd_pkg.get_bk_Data #1105~~
	1397	#sba prf_bkgnd_pkg.get_bk_Data #1112
1387	1398	#go
1388	1399	Curspdsval := False
1389		~~#delba prf_bkgnd_pkg.get_bk_Data #1105~~
	1400	#delba prf_bkgnd_pkg.get_bk_Data #1112
1390	1401	
1391		~~#sba prf_bkgnd_pkg.get_bk_Data #1227~~
	1402	#sba prf_bkgnd_pkg.get_bk_Data #1234

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

1392	1403	#go
1393	1404	Perf_Background_Dpkg.Pcmanspd.Speed.CAS := 1.0
1394	1405	Perf_Background_Dpkg.Pcmanspd.CASVALID := True
1395	1406	Perf_Background_Dpkg.Pcmanspd.Speed.MACH := 1.0
1396	1407	Perf_Background_Dpkg.Pcmanspd.MACHVALID := True
1397	1408	Perf_Background_Dpkg.Pccuraltcstr.Data := 1.0
1398	1409	Perf_Background_Dpkg.Pccuraltcstr.Valid := True
1399	1410	Perf_Background_Dpkg.Pccuraltcstr.Legidx := 1
1400	1411	Perf_Background_Dpkg.Pccuraltcstr.Lgidval := True
1401	1412	Perf_Background_Dpkg.Pccuraltcstr.Usevga := True
1402	1413	Perf_Background_Dpkg.Pccuraltcstr.Vgaidx := 1
1403	1414	Perf_Background_Dpkg.Pcprebcalt.Data := 1.0
1404	1415	Perf_Background_Dpkg.Pcprebcalt.Valid := True
1405	1416	Perf_Background_Dpkg.Pc3rdalt.Data := 1.0
1406	1417	Perf_Background_Dpkg.Pc3rdalt.Valid := True
1407	1418	Perf_Background_Dpkg.Pslcautoctl := True
1408	1419	Perf_Background_Dpkg.Vert_Auto_Mode := True
1409		~~#delba prf_bkgnd_pkg.get_bk_Data #1227~~
	1420	#delba prf_bkgnd_pkg.get_bk_Data #1234
1410	1421	
1411		~~#sba prf_bkgnd_pkg.get_bk_Data #1250~~
	1422	#sba prf_bkgnd_pkg.get_bk_Data #1257
1412	1423	#go
1413	1424	Perf_Background_Dpkg.Pcmanspd.Speed.CAS = 0.0
1414	1425	Perf_Background_Dpkg.Pcmanspd.CASVALID = False
1415	1426	Perf_Background_Dpkg.Pcmanspd.Speed.MACH = 0.0
1416	1427	Perf_Background_Dpkg.Pcmanspd.MACHVALID = False
1417	1428	Perf_Background_Dpkg.Pccuraltcstr.Data = 0.0
1418	1429	Perf_Background_Dpkg.Pccuraltcstr.Valid = False
1419	1430	Perf_Background_Dpkg.Pccuraltcstr.Legidx = 0
1420	1431	Perf_Background_Dpkg.Pccuraltcstr.Lgidval = False
1421	1432	Perf_Background_Dpkg.Pccuraltcstr.Usevga = False
1422	1433	Perf_Background_Dpkg.Pccuraltcstr.Vgaidx = 0
1423	1434	Perf_Background_Dpkg.Pcprebcalt.Data = 0.0
1424	1435	Perf_Background_Dpkg.Pcprebcalt.Valid = False
1425	1436	Perf_Background_Dpkg.Pc3rdalt.Data = 0.0
1426	1437	Perf_Background_Dpkg.Pc3rdalt.Valid = False
1427	1438	Perf_Background_Dpkg.Pslcautoctl = False
1428	1439	Perf_Background_Dpkg.Vert_Auto_Mode = False
1429		~~#delba prf_bkgnd_pkg.get_bk_Data #1250~~
	1440	#delba prf_bkgnd_pkg.get_bk_Data #1257
1430	1441	
1431		~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
	1442	#sba prf_bkgnd_pkg.get_bk_Data #1473

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1432  1443 #go
1433  1444 Perf_Background_Dpkg.Noise_Data.Tspd.Data  = 150.0
1434  1445 Perf_Background_Dpkg.Noise_Data.Tspd.Valid = True
1435  1446 Perf_Background_Dpkg.Lim_Max_Op_Cas       := 5.0
1436  1447 Perf_Background_Dpkg.Lim_Max_Op_Mach      := 0.0
1437       ~~#delba prf_bkgnd_pkg.get_bk_Data #1466~~
      1448 #delba prf_bkgnd_pkg.get_bk_Data #1473
1438  1449 
1439  1450 #sba Prf_External_Util_Pkg.Get_Maxop_Delta after_elab begin
1440  1451 #define Get_Maxop_Delta_Called   := True
1441  1452 #go
1442  1453 #end
1443  1454 
1444       ~~#sba prf_bkgnd_pkg.get_bk_Data  #1740~~
      1455 #sba prf_bkgnd_pkg.get_bk_Data  #1747
1445  1456 #go
1446  1457 Rwy_Temp = -56.481
1447  1458 
1448  1459 !run_test()
1449  1460 
1450  1461 -- OUTPUTS
1451  1462 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec = True
1452  1463 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec = True
1453  1464 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec = True
1454  1465 Perf_Background_Dpkg.Pstogwtval = True
1455  1466 Perf_Background_Dpkg.Pstogwt = 400.0
1456  1467 Perf_Background_Dpkg.Pcgwind = Valid
1457  1468 Perf_Background_Dpkg.Psgw = 400.0
1458  1469 Perf_Dpkg.Pcengoutprds = ENGOUTNOTVAL
1459  1470 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
1460  1471 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
1461  1472 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
1462  1473 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
1463  1474 Perf_Background_Dpkg.Flex_Isadev.Data = 77.481696
1464  1475 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = True
1465  1476 Perf_Background_Dpkg.Noise_Data.Altitude.Data = 300.0
1466  1477 Perf_Background_Dpkg.Noise_Data.Speed.Valid = True
1467  1478 Perf_Background_Dpkg.Noise_Data.Speed.Data = 250.0
1468  1479 Perf_Background_Dpkg.Speed_Annunciation.Cas             = 230.0
1469  1480 Perf_Background_Dpkg.Speed_Annunciation.Alt             = 15000.0
1470  1481 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  = Vg_Ext_Tpkg.Clb_Spd_Lim
1471  1482 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       = "ABCD   "
1472  1483 Get_Maxop_Delta_Called                                  = True
1473  1484 Get_Def_Thrust_Reduction_Alt_Called                     = True
```

```
1474  1485 Get_Cruise_Alt_Called                                   = True
1475  1486 Get_Ac_Config_Called                                    = True
1476  1487 Perf_Background_Dpkg.Lim_Max_Op_Cas                     = 0.0
1477  1488 Perf_Background_Dpkg.Lim_Max_Op_Mach                    = 0.45
1478  1489 Perf_Background_Dpkg.Noise_Data.Thrust                  = Maxclb
1479  1490 Perf_Background_Dpkg.Ac_Crosstrack_Error                = 2.49
1480  1491 Perf_Background_Dpkg.Early_Descent_From_Level           = true
1481  1492 Perf_Background_Dpkg.Altholdmode                        = true
1482  1493 Perf_Background_Dpkg.Alt_Curr_Baro.Valid = True
1483  1494 Perf_Background_Dpkg.Alt_Curr_Baro.Data = 23.20
1484  1495
1485  1496 ----------------------------------------------------------------------------------------------------------------------
           » --
1486  1497 TESTID: 2
1487  1498
1488  1499     Verify that if an engine-out condition exists and current flightphase is TO, then engine-out predictions flag is s
           » et to
1489  1500     NOPREDS.  Verify that when Pcitin is No_Itinerary that descent path is not invalidated.
1490  1501     PERF_SDD_0410 (PERF_SRD_1554_A3XX, PERF_SRD_1584_A3XX), PERF_SDD_3317_INT, PERF_SDD_0417_INT,
1491  1502      when the working flight plan is  Is_Active, a variety of following global data be retrieved
1492  1503      - Airborne flag
1493  1504        when Io_Fms_Aircraft_State_Dpkg.Is_Airborne is false
1494  1505      - when Io_Common_Irs_Dpkg.Sel_Src_Inertial_Vert_Speed is invalid,  A/C inertial vertical speed set to 0.0
1495  1506      - when Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Active is not valid, Altitude Hold mode flag status is not from
           » FMGC via the interface
1496  1507     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
1497  1508       PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
1498  1509       PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100,PERF_SRD_6005_INT)
1499  1510
1500  1511     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
1501  1512     working flight plan.
1502  1513     PERF_SDD_4328 (PERF_SRD_10166_INT)
1503  1514
1504  1515     The airborne flag(Psairborne) shall be set when
1505  1516         - the Is_Airborne flag from IO is valid and
1506  1517         - the current flight phase is not in preflight or done.
1507  1518     PERF_SDD_07495_INT
1508  1519
1509  1520     The ADC/FG input data validity(Adc_Fg_Valid) shall be determined from the validity of
1510  1521       - Static Air Temperature
1511  1522       - Pressure Altitude
1512  1523       - CAS, TAS, Mach (here the aircraft is not airborne and the validity can't perform) and
1513  1524     For the valid ADC/FG input data, the following data are retrieved from IO
1514  1525       - A/C Pressure altitude
```

```
      - A/C CAS
      - A/C Mach
      - A/C TAS
    Also if the baro corrected altitude is valid, then the current baro corrected altitude is retrieved from IO.
    PERF_SDD_07496_INT

    The ADC range flag shall be set to false when not all of the following conditions are valid
      - the aircraft pressure altitude is from -2000.00 ft to 50,000.00 ft.
      - the aircraft static air temperature is from -99.00 to 80.00 Celcius
      - the aircraft is airborne and
      - the aircraft CAS is from 0.0 kts to 450.0 kts.
      - the airacrft Mach is from 0.0 to 1.0 mach
      - the aircraft TAS is at or below 599.00 kts
      - the aircraft TAS is at or above 50.0 kts or the aircraft flight phase being takeoff or
        before with aircraft TAS is at or above 0.0 kts
    PERF_SDD_07497_INT

    The ADC/FG input data validity shall be set based on the validity of ADC range flag.
    PERF_SDD_07498_INT

    When the flight phase is descent or approach, the descent path reference shall be set to
    the guidance descent path reference(Va3pathref).
    PERF_SDD_07500_INT

    If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is
    not Secondary or engines are on, the aircraft gross weight shall be set to the following:
      - Aircraft GW from the Performance Weights function, if the flight phase is other than takeoff or before,
        or the aircraft gross weight or the Take Off gross weight being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT


--INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
```

```
1559  1570 Perf_Dpkg.Max_Gwt := 400.0
1560  1571 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
1561  1572 Perf_Background_Dpkg.Psignorehm := True
1562  1573 Perf_Background_Dpkg.Pcfltphase := Takeoff
1563  1574 Perf_Background_Dpkg.Ats_Enable := True
1564  1575 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Takeoff
1565  1576 Perf_Background_Dpkg.Psacalt := 10000.0
1566  1577 Perf_Database_Dpkg.Psmmo := 0.45
1567  1578 Perf_Background_Dpkg.Pszfw := 300.0
1568  1579 Perf_Background_Dpkg.Psblockfuel := 50.0
1569  1580 Perf_Background_Dpkg.Pstaxifuel := 25.0
1570  1581 Perf_Background_Dpkg.Psairborne := True
1571  1582 Perf_Background_Dpkg.Psautolat := False
1572  1583 Guid_Ext_Dpkg.Gcxxlatautoc := False
1573  1584 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
1574  1585 Perf_Background_Dpkg.Psengout := False
1575  1586 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
1576  1587 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
1577  1588 Perf_Dpkg.Repredict_Hm_Decel := True
1578  1589 Perf_Background_DPkg.Pshmdecel := True
1579  1590 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
1580  1591 Perf_Ads_Dpkg.Fi_Enabled := False
1581  1592 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
1582  1593 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
1583  1594 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
1584  1595 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
1585  1596 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
1586  1597 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
1587  1598 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
1588  1599 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
1589  1600 Perf_Background_Dpkg.Psappspdlat := True
1590  1601 Perf_Dpkg.Pcengoutprds := Altpln
1591  1602 Perf_Background_Dpkg.Pcpathref := Nopath
1592  1603 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
1593  1604 Perf_Background_DPkg.Pscurcas := 5.0
1594  1605 Perf_Background_DPkg.Pscurmach := 5.0
1595  1606 Perf_Background_DPkg.Pscurtas := 5.0
1596  1607 Perf_Background_Dpkg.Pcitin.Itinerary := No_Itinerary
1597  1608 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
1598  1609 Perf_Background_Dpkg.Pstogwtval := False
1599  1610 Perf_Background_Dpkg.Pstogwt := 50.0
1600  1611 Perf_Background_Dpkg.Pcgwind := Invalid
1601  1612 Perf_Background_Dpkg.Psgw := 0.0
1602  1613 Perf_Dpkg.Gross_Weight.Status := Valid
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1603  1614 Perf_Dpkg.Gross_Weight.Data := 150.0
1604  1615 Perf_Integration_DPkg.Pcairbrakes := Fullab
1605  1616 Perf_Background_Dpkg.Pcacconfig := 5
1606  1617 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
1607  1618 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
1608  1619 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
1609  1620 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
1610  1621 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
1611  1622 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
1612  1623 Perf_Background_Dpkg.Psstpclbact := True
1613  1624 Perf_Background_Dpkg.Psstpdesact := True
1614  1625 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
1615  1626 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
1616  1627 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
1617  1628 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
1618  1629 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
1619  1630 Perf_Background_Dpkg.Pcprebcalt.Valid := True
1620  1631 Perf_Background_Dpkg.Pcgmttime.Hour := 1
1621  1632 Perf_Background_Dpkg.Pcgmttime.Minute := 1
1622  1633 Perf_Background_Dpkg.Pcgmttime.Second := 1
1623  1634 Perf_Background_Dpkg.Psinertvs := 5.0
1624  1635 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
1625  1636 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
1626  1637 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
1627  1638 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
1628  1639 Perf_Ads_Dpkg.Pr_Enabled := False
1629  1640 ATC_DISCRETES_PKG:body.Adson_Flag := False
1630  1641 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
1631  1642 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
1632  1643 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
1633  1644 ^Noise_Speed_Val := True
1634  1645 Perf_Background_Dpkg.Pcactorsec                              := Temporary
1635  1646 CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Valid := False
1636  1647 CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Data := 23.20
1637  1648 Perf_Background_Dpkg.Alt_Curr_Baro.Valid := False
1638  1649 Perf_Background_Dpkg.Alt_Curr_Baro.Data := 0.00
1639  1650 
1640  1651 --update for PERF_SDD_0409
1641  1652 Guid_Checkpoint_Resynch_Dpkg.Vc3Cstrduald.Isbdatablock.Cstraltlim := false
1642  1653 --Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Active.Is_Valid & data
1643  1654 
1644  1655 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3 := false
1645  1656 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active  :=
           » true
```

1646	1657	
1647	1658	-- Reset Outputs
1648	1659	Perf_Background_Dpkg.Adc_Fg_Valid := True
1649	1660	Perf_Background_Dpkg.Early_Descent_From_Level := True
1650	1661	Perf_Background_Dpkg.Altholdmode := True
1651	1662	
1652	1663	#sba prf_bkgnd_pkg.get_bk_Data after_elaboration
1653	1664	# go
1654	1665	Perf_Dpkg.takeoff_gwt.valid := True
1655	1666	Perf_Dpkg.takeoff_gwt.data := 400.0
1656	1667	#DELB/ALL
1657	1668	
1658		~~#sba PRF_BKGND_PKG.GET_BK_DATA #665 INLINE IO_FMS_AIRCRAFT_STATE_DPKG.IS_AIRBORNE after_elab~~
	1669	#sba PRF_BKGND_PKG.GET_BK_DATA #671 INLINE IO_FMS_AIRCRAFT_STATE_DPKG.IS_AIRBORNE after_elab
1659	1670	#go
1660	1671	Airborne_Dat := False
1661		~~#delba PRF_BKGND_PKG.GET_BK_DATA #665 INLINE IO_FMS_AIRCRAFT_STATE_DPKG.IS_AIRBORNE after_elab~~
	1672	#delba PRF_BKGND_PKG.GET_BK_DATA #671 INLINE IO_FMS_AIRCRAFT_STATE_DPKG.IS_AIRBORNE after_elab
1662	1673	
1663		~~#sba prf_bkgnd_pkg.get_bk_Data #679~~
	1674	#sba prf_bkgnd_pkg.get_bk_Data #685
1664	1675	#go
1665	1676	Perf_Background_Dpkg.Psairborne = False
1666	1677	#DELB/ALL
1667	1678	
1668		~~#sba prf_bkgnd_pkg.get_bk_Data #776~~
	1679	#sba prf_bkgnd_pkg.get_bk_Data #782
1669	1680	#go
1670	1681	Perf_Background_Dpkg.Pcfltphase := Descent
1671		~~#delba prf_bkgnd_pkg.get_bk_Data #776~~
	1682	#delba prf_bkgnd_pkg.get_bk_Data #782
1672	1683	
1673		~~#sba prf_bkgnd_pkg.get_bk_Data #786~~
	1684	#sba prf_bkgnd_pkg.get_bk_Data #792
1674	1685	#go
1675	1686	Perf_Background_Dpkg.Pcpathref = INVALIDPATH
1676		~~#delba prf_bkgnd_pkg.get_bk_Data #786~~
	1687	#delba prf_bkgnd_pkg.get_bk_Data #792
1677	1688	
1678		~~#sba prf_bkgnd_pkg.get_bk_Data #802~~
	1689	#sba prf_bkgnd_pkg.get_bk_Data #809
1679	1690	#go
1680	1691	Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Sat := True
1681	1692	Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := False

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

1682	1693	Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach := False
1683	1694	Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas := False
1684	1695	Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas := False
1685	1696	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side1 := False
1686	1697	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side2 := False
1687	1698	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side1 := False
1688	1699	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side2 := False
1689		~~#delba prf_bkgnd_pkg.get_bk_Data #802~~
	1700	#delba prf_bkgnd_pkg.get_bk_Data #809
1690	1701	
1691		~~#sba prf_bkgnd_pkg.get_bk_Data #814~~
	1702	#sba prf_bkgnd_pkg.get_bk_Data #821
1692	1703	#go
1693	1704	Perf_Background_Dpkg.Adc_Fg_Valid = False
1694		~~#delba prf_bkgnd_pkg.get_bk_Data #814~~
	1705	#delba prf_bkgnd_pkg.get_bk_Data #821
1695	1706	
1696		~~#sba prf_bkgnd_pkg.get_bk_Data #826~~
	1707	#sba prf_bkgnd_pkg.get_bk_Data #833
1697	1708	#go
1698	1709	Perf_Background_Dpkg.Adc_Fg_Valid := True
1699	1710	Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat := 81.0
1700	1711	Perf_Background_Dpkg.Psairborne := False
1701		~~#delba prf_bkgnd_pkg.get_bk_Data #826~~
	1712	#delba prf_bkgnd_pkg.get_bk_Data #833
1702	1713	
1703		~~#sba prf_bkgnd_pkg.get_bk_Data #858~~
	1714	#sba prf_bkgnd_pkg.get_bk_Data #865
1704	1715	#go
1705	1716	Adc_In_Range = False
1706	1717	Perf_Background_Dpkg.Adc_Fg_Valid = False
1707	1718	
1708	1719	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.PRIM_Voted_Inertial_Vert_Speed := False
1709	1720	Io_IRS_Sel_Pkg.The_Selected_IRS.all.Io_IRS_MSG2_Validity_Rec.Inertial_Vert_Speed := False
1710	1721	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.PRIM_Voted_Inertial_Vert_Speed := 1.0
1711		~~#delba prf_bkgnd_pkg.get_bk_Data #858~~
	1722	#delba prf_bkgnd_pkg.get_bk_Data #865
1712	1723	
1713		~~#sba prf_bkgnd_pkg.get_bk_Data #871~~
	1724	#sba prf_bkgnd_pkg.get_bk_Data #878
1714	1725	#go
1715	1726	Perf_Background_Dpkg.Psinertvs = 0.0
1716		~~#delba prf_bkgnd_pkg.get_bk_Data #871~~
	1727	#delba prf_bkgnd_pkg.get_bk_Data #878

```
1717  1728
1718       ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
      1729 #sba prf_bkgnd_pkg.get_bk_Data #1473
1719  1730 #go
1720  1731 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
1721  1732 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
1722  1733 #DELB/ALL
1723  1734
1724  1735 !run_test()
1725  1736
1726  1737 -- OUTPUTS
1727  1738 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec = True
1728  1739 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec = True
1729  1740 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec = True
1730  1741 Perf_Background_Dpkg.Pstogwtval = True
1731  1742 Perf_Background_Dpkg.Pstogwt = 400.0
1732  1743 Perf_Background_Dpkg.Pcgwind = Valid
1733  1744 Perf_Background_Dpkg.Psgw = 150.0
1734  1745 Perf_Dpkg.Pcengoutprds = NOPREDS
1735  1746 Perf_Despath_Dpkg.Pcdespath.Vgavalid = True
1736  1747 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
1737  1748 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
1738  1749 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
1739  1750 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
1740  1751 Perf_Background_Dpkg.Early_Descent_From_Level           = false
1741  1752 Perf_Background_Dpkg.Altholdmode                        = false
1742  1753 Perf_Background_Dpkg.Alt_Curr_Baro.Valid = False
1743  1754 Perf_Background_Dpkg.Alt_Curr_Baro.Data = 0.00
1744  1755
1745  1756 -----------------------------------------------------------------------------------------------------------------------
           » --
1746  1757 TESTID: 3
1747  1758
1748  1759     Verify that if an engine-out condition exists and current flightphase is Goaround, then the engine-out predictions
           »  flag
1749  1760     is set to NOPREDS.  Verify that when pcitin is Fuel_Plan_Fpln_Preds that descent path is invalidated.
1750  1761     PERF_SDD_0417_INT, PERF_SDD_0418_INT, PERF_SDD_3105 (PERF_SRD_1919)
1751  1762     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
1752  1763      PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
1753  1764      PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
1754  1765     PERF_SDD_0410(PERF_SRD_1554_A3XX, PERF_SRD_1584_A3XX),
1755  1766
1756  1767     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
1757  1768     working flight plan.
```

```
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    If the flight phase is neither descent nor approach, the descent path reference shall be set to indicate Nopath.
    PERF_SDD_07500_INT

    If the current itinerary is one of the following:
    - Active Primary Flight Plan Predictions;
    - Temporary Primary Flight Plan Predictions;
    -Current mode predictions(Normal or High priority);
    - Optimum altitude predictions;
    then the descent path shall be retrieved from the descent path object
    manager via a call to Perf_Ext_Despath.Pgvdespath.
    PERF_SDD_3888_INT

    When flight phase is beyond cruise with manual speed mode, then the speed validity shall be set as follows.
        If CAS is selected on FCU then Valid flag for MACH speed is set to False.
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
    CAS is selected in this test case.
    PERF_SDD_07545_INT


--INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Pcfltphase := Goaround
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Goaround
Perf_Background_Dpkg.Psacalt := 10000.0
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1802  1813 Perf_Background_Dpkg.Psairborne := True
1803  1814 Perf_Background_Dpkg.Psautolat := False
1804  1815 Guid_Ext_Dpkg.Gcxxlatautoc := False
1805  1816 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
1806  1817 Perf_Background_Dpkg.Psengout := False
1807  1818 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
1808  1819 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
1809  1820 Perf_Dpkg.Repredict_Hm_Decel := True
1810  1821 Perf_Background_DPkg.Pshmdecel := True
1811  1822 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
1812  1823 Perf_Ads_Dpkg.Fi_Enabled := False
1813  1824 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
1814  1825 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
1815  1826 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
1816  1827 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
1817  1828 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
1818  1829 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
1819  1830 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
1820  1831 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
1821  1832 Perf_Background_Dpkg.Psappspdlat := True
1822  1833 Perf_Dpkg.Pcengoutprds := Altpln
1823  1834 Perf_Background_Dpkg.Pcpathref := Onpath
1824  1835 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
1825  1836 Perf_Background_DPkg.Pscurcas := 5.0
1826  1837 Perf_Background_DPkg.Pscurmach := 5.0
1827  1838 Perf_Background_DPkg.Pscurtas := 5.0
1828  1839 Perf_Background_Dpkg.Pcitin.Itinerary := Fuel_Plan_Fpln_Preds
1829  1840 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
1830  1841 Perf_Background_Dpkg.Pstogwtval := False
1831  1842 Perf_Background_Dpkg.Pstogwt := 50.0
1832  1843 Perf_Background_Dpkg.Pcgwind := Invalid
1833  1844 Perf_Background_Dpkg.Psgw := 0.0
1834  1845 Perf_Dpkg.Gross_Weight.Status := Valid
1835  1846 Perf_Dpkg.Gross_Weight.Data := 150.0
1836  1847 Perf_Integration_DPkg.Pcairbrakes := Fullab
1837  1848 Perf_Background_Dpkg.Pcacconfig := 5
1838  1849 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
1839  1850 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
1840  1851 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
1841  1852 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
1842  1853 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
1843  1854 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
1844  1855 Perf_Background_Dpkg.Psstpclbact := True
1845  1856 Perf_Background_Dpkg.Psstpdesact := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1846  1857 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
1847  1858 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
1848  1859 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
1849  1860 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
1850  1861 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
1851  1862 Perf_Background_Dpkg.Pcprebcalt.Valid := True
1852  1863 Perf_Background_Dpkg.Pcgmttime.Hour := 1
1853  1864 Perf_Background_Dpkg.Pcgmttime.Minute := 1
1854  1865 Perf_Background_Dpkg.Pcgmttime.Second := 1
1855  1866 Perf_Background_Dpkg.Psinertvs := 5.0
1856  1867 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
1857  1868 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
1858  1869 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
1859  1870 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
1860  1871 Perf_Ads_Dpkg.Pr_Enabled := False
1861  1872 ATC_DISCRETES_PKG:body.Adson_Flag := False
1862  1873 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
1863  1874 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
1864  1875 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
1865  1876 ^Noise_Speed_Val := True
1866  1877
1867  1878 --update for PERF_SDD_0409
1868  1879 --Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Active.Is_Valid & data
1869  1880 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3 := true
1870  1881 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active := f
           » alse
1871  1882
1872  1883 Perf_Background_Dpkg.Altholdmode := true
1873  1884
1874  1885 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
1875  1886 #go
1876  1887 Perf_Dpkg.takeoff_gwt.valid := True
1877  1888 Perf_Dpkg.takeoff_gwt.data := 400.0
1878  1889 #DELB/ALL
1879  1890
1880       ~~#sba prf_bkgnd_pkg.get_bk_Data #786~~
      1891 #sba prf_bkgnd_pkg.get_bk_Data #792
1881  1892 #go
1882  1893 Perf_Background_Dpkg.Pcpathref = Nopath
1883       ~~#delba prf_bkgnd_pkg.get_bk_Data #786~~
      1894 #delba prf_bkgnd_pkg.get_bk_Data #792
1884  1895
1885       ~~--#sba prf_bkgnd_pkg.get_bk_Data #1181~~
      1896 --#sba prf_bkgnd_pkg.get_bk_Data #1188
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
1886 1897 --#go
1887 1898 --Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
1888 1899 --Machmode                         := False
1889 1900 --Perf_Background_Dpkg.Pcmanspd.Machvalid := True
1890 1901 
1891      ~~#sba prf_bkgnd_pkg.get_bk_Data #1267~~
     1902 #sba prf_bkgnd_pkg.get_bk_Data #1274
1892 1903 #go
1893 1904 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
1894 1905 Machmode                         := False
1895 1906 Perf_Background_Dpkg.Pcmanspd.Machvalid := True
1896 1907 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec = False
1897 1908 #delb/all
1898 1909 
1899      ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
     1910 #sba prf_bkgnd_pkg.get_bk_Data #1473
1900 1911 #go
1901 1912 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
1902 1913 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
1903 1914 #delb/all
1904 1915 !run_test()
1905 1916 
1906 1917 -- OUTPUTS
1907 1918 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec = True
1908 1919 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec = True
1909 1920 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec = True
1910 1921 Perf_Background_Dpkg.Pstogwtval = True
1911 1922 Perf_Background_Dpkg.Pstogwt = 325.0
1912 1923 Perf_Background_Dpkg.Pcgwind = Valid
1913 1924 Perf_Background_Dpkg.Psgw = 325.0
1914 1925 Perf_Dpkg.Pcengoutprds = NOPREDS
1915 1926 Perf_Despath_Dpkg.Pcdespath.Vgavalid = False
1916 1927 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
1917 1928 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
1918 1929 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
1919 1930 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
1920 1931 Perf_Background_Dpkg.Pcmanspd.Machvalid = False
1921 1932 Perf_Background_Dpkg.Altholdmode = False
1922 1933 ----------------------------------------------------------------------------------------------------------------------
          » --
1923 1934 TESTID: 4
1924 1935 
1925 1936     Verify that if an engine-out condition exists and current flightphase is Preflight then the engine-out predictions
          »  flag
```

```
 1926   1937     is set to NOPREDS.  Verify that when pcitin is Secondary that descent path is invalidated.
 1927   1938     PERF_SDD_0417_INT, PERF_SDD_0418_INT, PERF_SDD_3105 (PERF_SRD_1919),
 1928   1939     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
 1929   1940                PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
 1930   1941                PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
 1931   1942     PERF_SDD_0410(PERF_SRD_1554_A3XX, PERF_SRD_1584_A3XX),
 1932   1943
 1933   1944     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
 1934   1945     working flight plan.
 1935   1946     PERF_SDD_4328 (PERF_SRD_10166_INT)
 1936   1947
 1937   1948     And if the VG CAS is less than V2+10 and the flight phase is less than or equal to climb then VG CAS is set to V2+
              » 10 speed.
 1938   1949     If the previous non-envelope-limited target speed is not set to current VG MACH then previous non-envelope-limited
              »  target speed
 1939   1950     shall be set to the current VG CAS target and the previous CAS/Mach speed indicator is set to indicate CAS speed t
              » ype.
 1940   1951     Here set VG CAS is less than V2+10 and flight phase is Preflight, previous CAS/Mach speed indicator is CAS.
 1941   1952     PERF_SDD_3053_INT
 1942   1953
 1943   1954
 1944   1955 -- INPUTS
 1945   1956 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
 1946   1957 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
 1947   1958 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
 1948   1959 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
 1949   1960 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
 1950   1961 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
 1951   1962 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
 1952   1963 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
 1953   1964 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
 1954   1965 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
 1955   1966 Perf_Dpkg.Min_Gwt := 100.0
 1956   1967 Perf_Dpkg.Max_Gwt := 400.0
 1957   1968 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
 1958   1969 Perf_Background_Dpkg.Psignorehm := True
 1959   1970 Perf_Background_Dpkg.Pcfltphase := Preflight
 1960   1971 Perf_Background_Dpkg.Ats_Enable := True
 1961   1972 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Preflight
 1962   1973 Perf_Background_Dpkg.Psacalt := 10000.0
 1963   1974 Perf_Database_Dpkg.Psmmo := 0.45
 1964   1975 Perf_Background_Dpkg.Pszfw := 300.0
 1965   1976 Perf_Background_Dpkg.Psblockfuel := 50.0
 1966   1977 Perf_Background_Dpkg.Pstaxifuel := 25.0
```

```
1967  1978 Perf_Background_Dpkg.Psairborne := True
1968  1979 Perf_Background_Dpkg.Psautolat := False
1969  1980 Guid_Ext_Dpkg.Gcxxlatautoc := False
1970  1981 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
1971  1982 Perf_Background_Dpkg.Psengout := False
1972  1983 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
1973  1984 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
1974  1985 Perf_Dpkg.Repredict_Hm_Decel := True
1975  1986 Perf_Background_DPkg.Pshmdecel := True
1976  1987 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
1977  1988 Perf_Ads_Dpkg.Fi_Enabled := False
1978  1989 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
1979  1990 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
1980  1991 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
1981  1992 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
1982  1993 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
1983  1994 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
1984  1995 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
1985  1996 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
1986  1997 Perf_Background_Dpkg.Psappspdlat := True
1987  1998 Perf_Dpkg.Pcengoutprds := Altpln
1988  1999 Guid_Ext_Dpkg.Va3lcautoctl := True
1989  2000 Perf_Background_Dpkg.Psvgonpath := False
1990  2001 Perf_Background_Dpkg.Pcpathref := Onpath
1991  2002 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
1992  2003 Perf_Background_DPkg.Pscurcas := 5.0
1993  2004 Perf_Background_DPkg.Pscurmach := 5.0
1994  2005 Perf_Background_DPkg.Pscurtas := 5.0
1995  2006 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
1996  2007 Perf_Background_Dpkg.Pstogwtval := False
1997  2008 Perf_Background_Dpkg.Pstogwt := 50.0
1998  2009 Perf_Background_Dpkg.Pcgwind := Invalid
1999  2010 Perf_Background_Dpkg.Psgw := 0.0
2000  2011 Perf_Dpkg.Gross_Weight.Status := Valid
2001  2012 Perf_Dpkg.Gross_Weight.Data := 150.0
2002  2013 Perf_Integration_DPkg.Pcairbrakes := Fullab
2003  2014 Perf_Background_Dpkg.Pcacconfig := 5
2004  2015 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
2005  2016 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
2006  2017 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
2007  2018 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
2008  2019 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
2009  2020 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
2010  2021 Perf_Background_Dpkg.Psstpclbact := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
2011  2022 Perf_Background_Dpkg.Psstpdesact := True
2012  2023 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
2013  2024 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
2014  2025 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
2015  2026 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
2016  2027 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
2017  2028 Perf_Background_Dpkg.Pcprebcalt.Valid := True
2018  2029 Perf_Background_Dpkg.Pcgmttime.Hour := 1
2019  2030 Perf_Background_Dpkg.Pcgmttime.Minute := 1
2020  2031 Perf_Background_Dpkg.Pcgmttime.Second := 1
2021  2032 Perf_Background_Dpkg.Psinertvs := 5.0
2022  2033 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
2023  2034 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
2024  2035 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
2025  2036 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
2026  2037 Perf_Ads_Dpkg.Pr_Enabled := False
2027  2038 ATC_DISCRETES_PKG:body.Adson_Flag := False
2028  2039 Perf_Integration_Dpkg.Psoldnoentgt := 1.0
2029  2040 Perf_Background_Dpkg.Pcoldcasmchi := Fmcs_Base_Types.Mach
2030  2041 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
2031  2042 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
2032  2043 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
2033  2044 ^Noise_Speed_Val := True
2034  2045 Perf_Background_Dpkg.Pcitin.Itinerary := Fuel_Plan_Fpln_Preds
2035  2046 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
2036  2047 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
2037  2048 Perf_Background_Dpkg.Psv2plus10                  := 1.0
2038  2049 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
2039  2050 # go
2040  2051 Perf_Dpkg.takeoff_gwt.valid := True
2041  2052 Perf_Dpkg.takeoff_gwt.data := 400.0
2042  2053 #DELB/ALL
2043       ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
      2054 #sba prf_bkgnd_pkg.get_bk_Data #1473
2044  2055 #go
2045  2056 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
2046  2057 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
2047  2058
2048  2059 !run_test()
2049  2060
2050  2061 -- OUTPUTS
2051  2062 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec = True
2052  2063 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec = True
2053  2064 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec = True
```

```
Perf_Integration_Dpkg.Psoldnoentgt = 1.0
Perf_Background_Dpkg.Pcoldcasmchi = Cas
Perf_Background_Dpkg.Pstogwtval = True
Perf_Background_Dpkg.Pstogwt = 325.0
Perf_Background_Dpkg.Pcgwind = Valid
Perf_Background_Dpkg.Psgw = 325.0
Perf_Dpkg.Pcengoutprds = NOPREDS
Perf_Despath_Dpkg.Pcdespath.Vgavalid = False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
Perf_Background_Dpkg.Psvgonpath := True

---------------------------------------------------------------------------------------------------------------------------
» --
TESTID: 5

    Verify that if an engine-out condition exists and current flightphase is cruise then the engine-out predictions fl
» ag
    is set to PRDSTODEST.  Verify that when pcitin is Fuel_Plan_Stage1 that descent path is invalidated.
    The Current Itinary is not secondary and so descent path is not retrieved from descent path object manager.(PERF_S
» DD_3682_INT).
    PERF_SDD_0412_INT, PERF_SDD_0417_INT,  PERF_SDD_3682_INT
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
                   PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
                   PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    Cdk_Vert_Dpkg.Engine_Out indicates that there is an Engine Out.

    If not ( Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is curren
» tly in Noise
    Ramp segment and no engine out condition exist) then, the validity of Perf_Background_Dpkg.Noise_Data.Altitude &
    Perf_Background_Dpkg.Noise_Data.Tspd shall be set to invalid and Perf_Background_Dpkg.Noise_Data.Thrust is set to
» no derate
    (Cdk_Entry_Tpkg.Drtnone).
    PERF_SDD_4339 (PERF_SRD_12371_INT)

    The anti ice data shall be copied from the IO_Engine_Data_Dpkg for the working flight plan when it valid.
    PERF_SDD_07169_INT

    A/C is in Cruise and current itin is Fuel_Plan_Stage1 so target speed is not
    limited by calling the speed envelope module.
    PERF_SDD_3055_INT

    And if the VG CAS is less than V2+10 and the flight phase is less than or equal to climb then VG CAS is set to V2+
» 10 speed.
    If the previous non-envelope-limited target speed is not set to current VG MACH then previous non-envelope-limited
»  target speed
    shall be set to the current VG CAS target and the previous CAS/Mach speed indicator is set to indicate CAS speed t
» ype.
    Here set VG CAS is less than V2+10 and flight phase is Cruise, previous CAS/Mach speed indicator is CAS.
    PERF_SDD_3053_INT


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Pcfltphase := Cruise
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Background_Dpkg.Psacalt := 10000.0
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := True
Perf_Background_Dpkg.Psautolat := False
Guid_Ext_Dpkg.Gcxxlatautoc := False
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
Perf_Background_Dpkg.Psengout := False
Cdk_Vert_Dpkg:Body.Engine_Out_I := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
2134  2145 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
2135  2146 Perf_Dpkg.Repredict_Hm_Decel := True
2136  2147 Perf_Background_DPkg.Pshmdecel := True
2137  2148 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
2138  2149 Perf_Ads_Dpkg.Fi_Enabled := False
2139  2150 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
2140  2151 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
2141  2152 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
2142  2153 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
2143  2154 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
2144  2155 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
2145  2156 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
2146  2157 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
2147  2158 Perf_Background_Dpkg.Psappspdlat := True
2148  2159 Perf_Dpkg.Pcengoutprds := Altpln
2149  2160 Perf_Background_Dpkg.Pcpathref := Onpath
2150  2161 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
2151  2162 Perf_Background_DPkg.Pscurcas := 5.0
2152  2163 Perf_Background_DPkg.Pscurmach := 5.0
2153  2164 Perf_Background_DPkg.Pscurtas := 5.0
2154  2165 Perf_Background_Dpkg.Pcitin.Itinerary := Fuel_Plan_Stage1
2155  2166 Perf_Despath_Dpkg.Pcdespath.Vgavalid := False
2156  2167 Perf_Background_Dpkg.Pstogwtval := False
2157  2168 Perf_Background_Dpkg.Pstogwt := 50.0
2158  2169 Perf_Background_Dpkg.Pcgwind := Invalid
2159  2170 Perf_Background_Dpkg.Psgw := 0.0
2160  2171 Perf_Dpkg.Gross_Weight.Status := Valid
2161  2172 Perf_Dpkg.Gross_Weight.Data := 150.0
2162  2173 Perf_Integration_DPkg.Pcairbrakes := Fullab
2163  2174 Perf_Background_Dpkg.Pcacconfig := 5
2164  2175 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
2165  2176 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
2166  2177 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
2167  2178 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 400.0
2168  2179 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
2169  2180 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
2170  2181 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
2171  2182 Perf_Background_Dpkg.Psstpclbact := True
2172  2183 Perf_Background_Dpkg.Psstpdesact := True
2173  2184 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
2174  2185 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
2175  2186 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
2176  2187 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
2177  2188 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
2178  2189 Perf_Background_Dpkg.Pcprebcalt.Valid := True
2179  2190 Perf_Background_Dpkg.Pcgmttime.Hour := 1
2180  2191 Perf_Background_Dpkg.Pcgmttime.Minute := 1
2181  2192 Perf_Background_Dpkg.Pcgmttime.Second := 1
2182  2193 Perf_Background_Dpkg.Psinertvs := 5.0
2183  2194 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
2184  2195 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
2185  2196 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
2186  2197 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
2187  2198 Perf_Ads_Dpkg.Pr_Enabled := False
2188  2199 ATC_DISCRETES_PKG:body.Adson_Flag := False
2189  2200 Perf_Integration_Dpkg.Psoldnoentgt := 1.0
2190  2201 Perf_Background_Dpkg.Pcoldcasmchi := Fmcs_Base_Types.Mach
2191  2202 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmecon
2192  2203 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
2193  2204 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
2194  2205 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
2195  2206 ^Noise_Speed_Val := False
2196  2207 Perf_Background_Dpkg.Noise_Data.Altitude.Valid := True
2197  2208 Perf_Background_Dpkg.Noise_Data.Speed.Valid    := True
2198  2209 Perf_Background_Dpkg.Noise_Data.Thrust := Cdk_Entry_Tpkg.Drt1
2199  2210 Perf_Background_Dpkg.Noise_Data.Tspd.Valid := True
2200  2211 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
2201  2212 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
2202  2213 Perf_Background_Dpkg.Ac_Anti_Ice                 := False
2203  2214 Perf_Integration_Dpkg.Psoldnoentgt               := 1.0
2204  2215
2205  2216 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
2206  2217 # go
2207  2218 Perf_Dpkg.takeoff_gwt.valid := True
2208  2219 Perf_Dpkg.takeoff_gwt.data := 400.0
2209  2220 Perf_Background_Dpkg.Psgetout := True
2210  2221 Perf_Background_Dpkg.Ref_Flight_Plan := 1
2211  2222 Perf_Ext_Despath:Body.data_storage(Active).Pgvdespath.Vgavalid := True
2212  2223 #DELB/ALL
2213       ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
      2224 #sba prf_bkgnd_pkg.get_bk_Data #1473
2214  2225 #go
2215  2226 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
2216  2227 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
2217  2228 Perf_Background_Dpkg.Noise_Data.Thrust = Drtnone
2218  2229 Perf_Background_Dpkg.Noise_Data.Tspd.Valid = False
2219  2230
2220  2231 !run_test()
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
2221  2232
2222  2233 -- Outputs
2223  2234
2224  2235 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec = True
2225  2236 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec = True
2226  2237 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec = True
2227  2238 Perf_Integration_Dpkg.Psoldnoentgt = 0.0
2228  2239 Perf_Background_Dpkg.Pcoldcasmchi = Cas
2229  2240 Perf_Dpkg.Pcengoutprds = PRDSTODEST
2230  2241 Perf_Despath_Dpkg.Pcdespath.Vgavalid = False
2231  2242 Perf_Background_Dpkg.Psautolat = False
2232  2243 Perf_Background_Dpkg.Psengout = True
2233  2244 Perf_Background_Dpkg.Pcfltphase = Cruise
2234  2245 Perf_Background_Dpkg.Pcspeedmode = Perf_Ext_Tpkg.Vmspd
2235  2246 Perf_Background_DPkg.Pscurcas = 5.0
2236  2247 Perf_Background_DPkg.Pscurmach = 5.0
2237  2248 Perf_Background_DPkg.Pscurtas = 5.0
2238  2249 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
2239  2250 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
2240  2251 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
2241  2252 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
2242  2253 Perf_Background_Dpkg.Ac_Anti_Ice = True
2243  2254
2244  2255 ----------------------------------------------------------------------------------------------------------------------
           » --
2245  2256 TESTID: 6
2246  2257
2247  2258     Verify that when current itinerary is Fuel_Plan_Stage1 and Psgetout set to False,then
2248  2259     Invalidate the descent path to ensure that it is rebuilt. (PERF_SDD_3681_INT).
2249  2260     PERF_SDD_3053_INT, PERF_SDD_3681_INT
2250  2261     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
2251  2262                    PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
2252  2263                    PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
2253  2264
2254  2265     Cdk_Vert_Dpkg.Engine_Out indicates that there is an Engine Out.
2255  2266
2256  2267     If not ( Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is curren
           » tly in Noise
2257  2268     Ramp segment and no engine out condition exist) then, the validity of Perf_Background_Dpkg.Noise_Data.Altitude &
2258  2269     Perf_Background_Dpkg.Noise_Data.Tspd shall be set to invalid and Perf_Background_Dpkg.Noise_Data.Thrust is set to
           » no derate
2259  2270     (Cdk_Entry_Tpkg.Drtnone).
2260  2271     PERF_SDD_4339 (PERF_SRD_12371_INT)
2261  2272
```

```
    The anti ice validity flag is set to false when it invalid.
    PERF_SDD_07169_INT

    The Current Itinary is FUEL PLANNING STAGE 1 and descent path is retrieved from descent path object manager.
    PERF_SDD_3682_INT

    The bleeds data: the engine cowl, wing and air conditioning bleeds validity flags are set to false when it invalid
    PERF_SDD_4328 (PERF_SRD_10166_INT)


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := false
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := false
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := false
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := false
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := false
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Pcfltphase := Cruise
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Background_Dpkg.Psacalt := 10000.0
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := True
Perf_Background_Dpkg.Psautolat := False
Guid_Ext_Dpkg.Gcxxlatautoc := False
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := True
Perf_Background_Dpkg.Psengout := False
Cdk_Vert_Dpkg:Body.Engine_Out_I := True
Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
Perf_Dpkg.Repredict_Hm_Decel := True
Perf_Background_DPkg.Pshmdecel := True
Perf_Background_Dpkg.Pcholdflags.Hmactive := True
Perf_Ads_Dpkg.Fi_Enabled := False
```

```
2306   2317 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
2307   2318 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
2308   2319 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
2309   2320 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
2310   2321 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
2311   2322 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
2312   2323 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
2313   2324 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
2314   2325 Perf_Background_Dpkg.Psappspdlat := True
2315   2326 Perf_Dpkg.Pcengoutprds := Altpln
2316   2327 Perf_Background_Dpkg.Pcpathref := Onpath
2317   2328 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
2318   2329 Perf_Background_DPkg.Pscurcas := 5.0
2319   2330 Perf_Background_DPkg.Pscurmach := 5.0
2320   2331 Perf_Background_DPkg.Pscurtas := 5.0
2321   2332 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
2322   2333 Perf_Background_Dpkg.Pstogwtval := False
2323   2334 Perf_Background_Dpkg.Pstogwt := 50.0
2324   2335 Perf_Background_Dpkg.Pcgwind := Invalid
2325   2336 Perf_Background_Dpkg.Psgw := 0.0
2326   2337 Perf_Dpkg.Gross_Weight.Status := Valid
2327   2338 Perf_Dpkg.Gross_Weight.Data := 150.0
2328   2339 Perf_Integration_DPkg.Pcairbrakes := Fullab
2329   2340 Perf_Background_Dpkg.Pcacconfig := 5
2330   2341 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
2331   2342 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
2332   2343 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
2333   2344 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 400.0
2334   2345 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
2335   2346 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
2336   2347 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
2337   2348 Perf_Background_Dpkg.Psstpclbact := True
2338   2349 Perf_Background_Dpkg.Psstpdesact := True
2339   2350 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
2340   2351 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
2341   2352 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
2342   2353 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
2343   2354 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
2344   2355 Perf_Background_Dpkg.Pcprebcalt.Valid := True
2345   2356 Perf_Background_Dpkg.Pcgmttime.Hour := 1
2346   2357 Perf_Background_Dpkg.Pcgmttime.Minute := 1
2347   2358 Perf_Background_Dpkg.Pcgmttime.Second := 1
2348   2359 Perf_Background_Dpkg.Psinertvs := 5.0
2349   2360 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
```

```
2350  2361 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
2351  2362 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
2352  2363 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
2353  2364 Perf_Ads_Dpkg.Pr_Enabled := False
2354  2365 ATC_DISCRETES_PKG:body.Adson_Flag := False
2355  2366 Perf_Integration_Dpkg.Psoldnoentgt := 1.0
2356  2367 Perf_Background_Dpkg.Pcoldcasmchi := Cas
2357  2368 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmecon
2358  2369 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := False
2359  2370 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := False
2360  2371 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
2361  2372 ^Noise_Speed_Val := False
2362  2373 Perf_Background_Dpkg.Pcitin.Itinerary := Fuel_Plan_Stage1
2363  2374 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
2364  2375 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
2365  2376 Perf_Background_Dpkg.Ac_Anti_Ice                := True
2366  2377 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai         := True
2367  2378 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai           := True
2368  2379 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond          := True
2369  2380
2370  2381 Perf_Background_Dpkg.Noise_Data.Altitude.Valid := True
2371  2382 Perf_Background_Dpkg.Noise_Data.Speed.Valid    := True
2372  2383 Perf_Background_Dpkg.Noise_Data.Thrust := Cdk_Entry_Tpkg.Drt1
2373  2384 Perf_Background_Dpkg.Noise_Data.Tspd.Valid := True
2374  2385
2375  2386 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
2376  2387 # go
2377  2388 Perf_Dpkg.takeoff_gwt.valid := True
2378  2389 Perf_Dpkg.takeoff_gwt.data := 400.0
2379  2390 Perf_Background_Dpkg.Psgetout := False
2380  2391 #DELB/ALL
2381       ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
      2392 #sba prf_bkgnd_pkg.get_bk_Data #1473
2382  2393 #go
2383  2394 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
2384  2395 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
2385  2396 Perf_Background_Dpkg.Noise_Data.Thrust = Drtnone
2386  2397 Perf_Background_Dpkg.Noise_Data.Tspd.Valid = False
2387  2398
2388  2399 !run_test()
2389  2400
2390  2401 -- OUTPUTS
2391  2402
2392  2403 Perf_Integration_Dpkg.Psoldnoentgt = 0.0
```

```
Perf_Background_Dpkg.Pcoldcasmchi = Fmcs_Base_Types.Mach
Perf_Despath_Dpkg.Pcdespath.Vgavalid = False
Perf_Background_Dpkg.Psautolat = False
Perf_Background_Dpkg.Psengout = True
Perf_Background_Dpkg.Pcfltphase = Cruise
Perf_Background_Dpkg.Pcspeedmode = Perf_Ext_Tpkg.Vmspd
Perf_Background_DPkg.Pscurcas = 5.0
Perf_Background_DPkg.Pscurmach = 5.0
Perf_Background_DPkg.Pscurtas = 5.0
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = False
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = False
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = False
Perf_Background_Dpkg.Ac_Anti_Ice = False

------------------------------------------------------------------------------------------------------------------------
» --
TESTID: 7

    Verify that when itin is Secprim that descent path is not invalidated.
    The Current Itinary is secondary and descent path is retrieved from descent path object manager.(PERF_SDD_3682_INT
» ).

    For an independent from-to pair Secondaryn flight plan, the starting predictions data shall be set up
    as if the aircraft were sitting on the ground in pre-flight at the origin airport of the Secondaryn flight plan,
    rather than from the current aircraft state.  Thus, following data are set:
    - The airborne flag (Psairborne) is set false.
    - Auto lateral mode (Psautolat) is set to true.
    - Engine out flag (Psengout) is set to false.
    - The current flightphase (Pcfltphase) is set to pre-flight.
    - Speed mode (Pcspeedmode) is set to Vmecon.
    - Despath reference (Pcpathref) is set to Nopath.
    - Current GMT time (Pcgmttime) (Hours, Minutes & Seconds) is set to zero.
    - Inertial vertical speed (Psinertvs) is set to zero.
    - Current aircraft speeds (Pscurtas, Pscurmach & Pscurcas) are set to zero.
    - Validity of Aircraft True air speed (Pscurtasvalid) set to False
    - Aircraft configuration (Pcacconfig) is set to clean.
    - Airbrakes (Pcairbrakes) are set to zero airbrakes.
    - Constraint management (Pccuraltcstr) validity is set to false.
    - Previous captured barometric altitude (Pcprebcalt) validity is set to false.
    - All the flags in the perf hold flag record (Pcholdflags) are set to false.
    - All the flags in the descent limit latch record (Pcdeslimlat) are set to false.
    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false.
    - Flag indicating aircraft is within 3 NM prior to the entry of the HM(Psconsider_Hm) is      set to false.
```

```
2435  2446      - Flag indicating aircraft is in HA/HF decel zone (Pshxpxdecel) is set to false.
2436  2447      - Flag indicating aircraft is in HM decel zone (Pshmdecel) is set to false.
2437  2448      - Flag indicating to Ignore HM (Psignorehm) is set to true.
2438  2449      - Background step climb & step descent active flags (Psstpclbact & Psstpdesact) are set     to false.
2439  2450      - Engines off status (Psenginesoff) is set to true (off).
2440  2451      - Aircraft engine or wing anti ice (Ac_Anti_Ice) is set to false (Off).
2441  2452      - Aircraft bleeds status (Ac_Bleeds); Engine Cowl Anti-Ice bleed, Wing Anti-Ice Bleed and
2442  2453        Air Conditioning Bleed are set to false (off).
2443  2454      - Cruise altitude (Pscrzalt) data is set by calling procedure
2444  2455        Fpln_Ext_Dpkg.Get_Cruise_Alt.
2445  2456      - Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
2446  2457        Data and Valid values respectively.
2447  2458      - Valid cruise altitude flag (Valcrzalt) is set from the retrieved cruise altitude data.
2448  2459      - ADC/FG input data (Adc_Fg_Valid) validity is set to true.
2449  2460      - Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to true.
2450  2461      - The Secondary flight plan predictions flag is set to True, if the current itinerary is primary flight plan predi
            » ctions.
2451  2462      - The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Ma
            » ximum_Alt.
2452  2463      - The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_
            » Maximum_Alt.
2453  2464
2454  2465      These initializations make predictions independent of the Active Primary flightplan and current aircraft character
            » istics
2455  2466
2456  2467      in this case,
2457  2468      flight plan is Secondary
2458  2469      the current itinerary is  primary flight plan predictions
2459  2470      PERF_SDD_4796(PERF_SRD_1592, PERF_SRD_23775, PERF_SRD_6005_INT)
2460  2471
2461  2472      If Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is currently in
            »  Noise Ramp
2462  2473      segment and no engine out condition exist then the following noise data shall be set up for background's usage:
2463  2474      PERF_SDD_5607_INT
2464  2475
2465  2476      The validity of Perf_Background_Dpkg.Noise_Data.Altitude shall be set to valid and its value is set to Noise_End_A
            » lt obtained
2466  2477      from FPLN.
2467  2478      PERF_SDD_5608_INT
2468  2479
2469  2480      Here, Cdk_Vert_Dpkg.Engine_Out indicates that there is no Engine Out.
2470  2481
2471  2482      If Noise Speed (Noise_Speed_Val) from FPLN is valid then the validity of Perf_Background_Dpkg.Noise_Data.Speed sha
            » ll be set to
```

```
    valid and its value is set to Noise_Speed obtained from FPLN, otherwise its validity is set to invalid.
    As in this TC, Noise_Speed_Val is False, the validity of Perf_Background_Dpkg.Noise_Data.Speed is set to False.
    PERF_SDD_5610_INT


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Prf_Bkgnd_Pkg:BODY.Valcrzalt := False
Perf_Background_Dpkg.Pcactorsec:= Secondary
Perf_Background_Dpkg.Flight_Plan_Type := No_Preds
Perf_Background_Dpkg.Pcitin.Flight_Plan := Secondary
Perf_Background_Dpkg.Psignorehm := False
Perf_Background_Dpkg.Pcfltphase := Cruise
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Background_Dpkg.Psacalt := 10000.0
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := True
Perf_Background_Dpkg.Psautolat := False
Guid_Ext_Dpkg.Gcxxlatautoc := False
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
Perf_Background_Dpkg.Psengout := True
Cdk_Vert_Dpkg:Body.Engine_Out_I := False
Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
Perf_Dpkg.Repredict_Hm_Decel := True
Perf_Background_DPkg.Pshmdecel := True
Perf_Background_Dpkg.Pcholdflags.Hmactive := True
Perf_Ads_Dpkg.Fi_Enabled := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
```

```
2516  2527 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
2517  2528 Perf_Background_Dpkg.Psappspdlat := True
2518  2529 Perf_Dpkg.Pcengoutprds := Altpln
2519  2530 Perf_Background_Dpkg.Pcpathref := Onpath
2520  2531 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
2521  2532 Perf_Background_DPkg.Pscurcas := 5.0
2522  2533 Perf_Background_DPkg.Pscurmach := 5.0
2523  2534 Perf_Background_DPkg.Pscurtas := 5.0
2524  2535 Perf_Background_Dpkg.Psenginesoff := False
2525  2536 Perf_Despath_Dpkg.Pcdespath.Vgavalid := False
2526  2537 Perf_Background_Dpkg.Pstogwtval := False
2527  2538 Perf_Background_Dpkg.Pstogwt := 50.0
2528  2539 Perf_Background_Dpkg.Pcgwind := Invalid
2529  2540 Perf_Background_Dpkg.Psgw := 0.0
2530  2541 Perf_Dpkg.Gross_Weight.Status := Valid
2531  2542 Perf_Dpkg.Gross_Weight.Data := 150.0
2532  2543 Perf_Integration_DPkg.Pcairbrakes := Fullab
2533  2544 Perf_Background_Dpkg.Pcacconfig := 5
2534  2545 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := True
2535  2546 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
2536  2547 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
2537  2548 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 400.0
2538  2549 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
2539  2550 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
2540  2551 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
2541  2552 Perf_Background_Dpkg.Psstpclbact := True
2542  2553 Perf_Background_Dpkg.Psstpdesact := True
2543  2554 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
2544  2555 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
2545  2556 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
2546  2557 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
2547  2558 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
2548  2559 Perf_Background_Dpkg.Pcprebcalt.Valid := True
2549  2560 Perf_Background_Dpkg.Pcgmttime.Hour := 1
2550  2561 Perf_Background_Dpkg.Pcgmttime.Minute := 1
2551  2562 Perf_Background_Dpkg.Pcgmttime.Second := 1
2552  2563 Perf_Background_Dpkg.Psinertvs := 5.0
2553  2564 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
2554  2565 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
2555  2566 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
2556  2567 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
2557  2568 Perf_Ads_Dpkg.Pr_Enabled := False
2558  2569 ATC_DISCRETES_PKG:body.Adson_Flag := False
2559  2570 Perf_Integration_Dpkg.Psoldnoentgt := 0.0
```

```
2560  2571 Perf_Background_Dpkg.Pcoldcasmchi := Fmcs_Base_Types.Mach
2561  2572 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
2562  2573 Perf_Background_Dpkg.Adc_Fg_Valid := False
2563  2574 Prf_Bkgnd_Pkg:body.Fgspdsvalid := False
2564  2575 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt_Status  := Takeoff_Alt_Types.Active
2565  2576 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_Speed_Val := False
2566  2577 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt :=  300.0
2567  2578 Perf_Background_Dpkg.Noise_Data.Altitude.Data := 0.0
2568  2579 Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
2569  2580 Perf_Background_Dpkg.Noise_Data.Speed.Valid := True
2570  2581 Perf_Background_Dpkg.Pcitin.Itinerary := Prim_Fpln_Preds
2571  2582 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
2572  2583 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
2573  2584 Perf_Background_Dpkg.Ac_Crosstrack_Error         := 2.5
2574  2585
2575  2586 Perf_Background_Dpkg.Pscurtasvalid               := True
2576  2587 Perf_Background_Dpkg.Psconsider_Hm               := True
2577  2588 Perf_Background_Dpkg.Pshxpxdecel                 := True
2578  2589 Perf_Background_Dpkg.Ac_Anti_Ice                 := True
2579  2590 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai         := True
2580  2591 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai           := True
2581  2592 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond          := True
2582  2593 Perf_Background_Dpkg.Pcholdflags.Consider_Hm     := True
2583  2594 #define Get_Cruise_Alt_Called := False
2584  2595
2585  2596 Perf_Dpkg.takeoff_gwt.valid := True
2586  2597 Perf_Dpkg.takeoff_gwt.data := 400.0
2587  2598 Perf_Background_Dpkg.Psgetout := True
2588  2599 Perf_Background_Dpkg.Ref_Flight_Plan := 1
2589  2600 Perf_Ext_Despath:Body.data_storage(Active).Pgvdespath.Vgavalid := True
2590  2601 Perf_Despath_Dpkg.Pcdespath.Vgavalid := true
2591  2602 Perf_Background_Dpkg.Pcitin.Itinerary := Prim_Fpln_Preds
2592  2603 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
2593  2604 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
2594  2605 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.20
2595  2606 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.30
2596  2607 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid := false
2597  2608 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid := false
2598  2609 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data := 0.00
2599  2610 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data := 0.00
2600  2611 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.valid  := False
2601  2612 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data   := 0.0
2602  2613
2603  2614 #sba Fpln_Ext_Dpkg.Get_Cruise_Alt after_elab begin
```

```
2604  2615 #define Get_Cruise_Alt_Called   := True
2605  2616 #go
2606  2617 #end
2607  2618 
2608  2619 !run_test()
2609  2620 
2610  2621 -- OUTPUTS
2611  2622 
2612  2623 Perf_Integration_Dpkg.Psoldnoentgt = 0.0
2613  2624 Perf_Background_Dpkg.Pcoldcasmchi = Fmcs_Base_Types.Mach
2614  2625 Perf_Despath_Dpkg.Pcdespath.Vgavalid /= False
2615  2626 
2616  2627 Perf_Background_Dpkg.Psairborne = False
2617  2628 Perf_Background_Dpkg.Psautolat = True
2618  2629 Perf_Background_Dpkg.Psengout = False
2619  2630 Perf_Background_Dpkg.Psgetout = TRUE
2620  2631 Perf_Background_Dpkg.Pcfltphase = Preflight
2621  2632 Perf_Background_Dpkg.Pcspeedmode = Perf_Ext_Tpkg.Vmecon
2622  2633 Perf_Background_Dpkg.Psinertvs = 0.0
2623  2634 Perf_Background_Dpkg.Pcpathref = Nopath
2624  2635 Perf_Background_Dpkg.Pscurtasvalid = False
2625  2636 Perf_Background_Dpkg.Pcacconfig = Clean
2626  2637 Perf_Integration_Dpkg.Pcairbrakes = Zeroab
2627  2638 Perf_Background_Dpkg.Pccuraltcstr.Valid = False
2628  2639 Perf_Background_Dpkg.Pcprebcalt.Valid = False
2629  2640 Perf_Background_Dpkg.Psappspdlat      = False
2630  2641 Perf_Background_DPkg.Pshmdecel        = False
2631  2642 Perf_Background_Dpkg.Psconsider_Hm    = False
2632  2643 Perf_Background_Dpkg.Pshxpxdecel      = False
2633  2644 Perf_Background_Dpkg.Psignorehm       = True
2634  2645 Perf_Background_Dpkg.Psstpclbact = False
2635  2646 Perf_Background_Dpkg.Psstpdesact = False
2636  2647 Perf_Background_Dpkg.Psenginesoff = True
2637  2648 Perf_Background_Dpkg.Ac_Anti_Ice  = False
2638  2649 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = False
2639  2650 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai   = False
2640  2651 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond  = False
2641  2652 Prf_Bkgnd_Pkg:BODY.Valcrzalt = Perf_Background_Dpkg.Pscrzalt.Valid
2642  2653 Perf_Background_Dpkg.Adc_Fg_Valid = True
2643  2654 Prf_Bkgnd_Pkg:body.Fgspdsvalid = True
2644  2655 Perf_Background_Dpkg.Pcholdflags.Hmdecel = False
2645  2656 Perf_Background_Dpkg.Pcholdflags.Hmactive = False
2646  2657 Perf_Background_Dpkg.Pcholdflags.Manhmwarn = False
2647  2658 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel = False
```

```
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv = False
Perf_Background_Dpkg.Pcholdflags.Hmdistval = False
Perf_Background_Dpkg.Pcholdflags.Consider_Hm =False
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim = False
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim = False
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel = False
Perf_Background_Dpkg.Pcgmttime.Hour = 0
Perf_Background_Dpkg.Pcgmttime.Minute = 0
Perf_Background_Dpkg.Pcgmttime.Second = 0
Perf_Background_DPkg.Pscurcas = 0.0
Perf_Background_DPkg.Pscurmach = 0.0
Perf_Background_DPkg.Pscurtas = 0.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas = 0.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach = 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
Perf_Background_Dpkg.Ac_Crosstrack_Error      = 0.0
Get_Cruise_Alt_Called                         = True
Perf_Background_Dpkg.Noise_Data.Altitude.Valid = True
Perf_Background_Dpkg.Noise_Data.Altitude.Data  = 300.0
Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
Perf_Background_Dpkg.Secn_Fpln_Itin = True
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid = True
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid = True
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data = 32.20
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data = 32.30
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.valid  = True
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data   = 5.0

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 8

    If the current VG CAS and Mach targets are valid, and the flight phase is Descent or
    Approach, then the Optimum Descent speeds shall be set as follows:
    if the following are true:
      - VG Partially-Limited CAS is non-zero, and Any of the following are true:
        - The A/C is currently in a deceleration, and either:
          - The predictions count is less than or equal to one, or
          - The current working flight plan is Active and the difference between the current prediction sequence
          counter and starting prediction sequence counter is less than or equal to 2, or
          - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
          being processed is Current Mode predictions(Normal or High Priority) ,or
          - First Preds After Insert Temporary indication is True;
        - The A/C is not in Auto Lateral mode,
2691  2702         - Approach Speeds have been latched.
2692  2703     then,
2693  2704       Optimum Descent CAS is set to the VG Partially-Limited CAS
2694  2705     otherwise,
2695  2706       Optimum Descent CAS is set to current VG CAS target.
2696  2707     -- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
2697  2708     -- VG Partially-Limited CAS is zero.
2698  2709     -- Optimum Descent CAS is set to current VG CAS target.
2699  2710     PERF_SDD_2249_INT
2700  2711     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
2701  2712                   PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
2702  2713                   PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
2703  2714
2704  2715     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
2705  2716     working flight plan.
2706  2717     PERF_SDD_4328 (PERF_SRD_10166_INT)
2707  2718
2708  2719
2709  2720 -- INPUTS
2710  2721 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
2711  2722 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
2712  2723 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
2713  2724 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
2714  2725 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
2715  2726 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
2716  2727 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
2717  2728 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
2718  2729 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
2719  2730 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
2720  2731 Guid_Spds_Dpkg.Vc3prtlimcas := 0.0
2721  2732 Perf_Dpkg.Min_Gwt := 100.0
2722  2733 Perf_Dpkg.Max_Gwt := 400.0
2723  2734 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
2724  2735 Perf_Background_Dpkg.Psignorehm := True
2725  2736 Perf_Background_Dpkg.Pcfltphase := Descent
2726  2737 Perf_Background_Dpkg.Ats_Enable := True
2727  2738 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Descent
2728  2739 Perf_Background_Dpkg.Psacalt := 10000.0
2729  2740 Perf_Database_Dpkg.Psmmo := 0.45
2730  2741 Perf_Background_Dpkg.Pszfw := 300.0
2731  2742 Perf_Background_Dpkg.Psblockfuel := 50.0
2732  2743 Perf_Background_Dpkg.Pstaxifuel := 25.0
2733  2744 Perf_Background_Dpkg.Psairborne := True
2734  2745 Perf_Background_Dpkg.Psautolat := False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
2735   2746 Guid_Ext_Dpkg.Gcxxlatautoc := False
2736   2747 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
2737   2748 Perf_Background_Dpkg.Psengout := True
2738   2749 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
2739   2750 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
2740   2751 Perf_Dpkg.Repredict_Hm_Decel := True
2741   2752 Perf_Background_DPkg.Pshmdecel := True
2742   2753 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
2743   2754 Perf_Ads_Dpkg.Fi_Enabled := False
2744   2755 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
2745   2756 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
2746   2757 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
2747   2758 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
2748   2759 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
2749   2760 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
2750   2761 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
2751   2762 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
2752   2763 Perf_Background_Dpkg.Psappspdlat := True
2753   2764 Perf_Dpkg.Pcengoutprds := Altpln
2754   2765 Perf_Background_Dpkg.Pcpathref := Onpath
2755   2766 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
2756   2767 Perf_Background_DPkg.Pscurcas := 5.0
2757   2768 Perf_Background_DPkg.Pscurmach := 5.0
2758   2769 Perf_Background_DPkg.Pscurtas := 5.0
2759   2770 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
2760   2771 Perf_Background_Dpkg.Pstogwtval := False
2761   2772 Perf_Background_Dpkg.Pstogwt := 50.0
2762   2773 Perf_Background_Dpkg.Pcgwind := Invalid
2763   2774 Perf_Background_Dpkg.Psgw := 0.0
2764   2775 Perf_Dpkg.Gross_Weight.Status := Valid
2765   2776 Perf_Dpkg.Gross_Weight.Data := 150.0
2766   2777 Perf_Integration_DPkg.Pcairbrakes := Fullab
2767   2778 Perf_Background_Dpkg.Pcacconfig := 5
2768   2779 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
2769   2780 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
2770   2781 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
2771   2782 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
2772   2783 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
2773   2784 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
2774   2785 Perf_Background_Dpkg.Psstpclbact := True
2775   2786 Perf_Background_Dpkg.Psstpdesact := True
2776   2787 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
2777   2788 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
2778   2789 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
2779  2790 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
2780  2791 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
2781  2792 Perf_Background_Dpkg.Pcprebcalt.Valid := True
2782  2793 Perf_Background_Dpkg.Pcgmttime.Hour := 1
2783  2794 Perf_Background_Dpkg.Pcgmttime.Minute := 1
2784  2795 Perf_Background_Dpkg.Pcgmttime.Second := 1
2785  2796 Perf_Background_Dpkg.Psinertvs := 5.0
2786  2797 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
2787  2798 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
2788  2799 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
2789  2800 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
2790  2801 Perf_Ads_Dpkg.Pr_Enabled := False
2791  2802 ATC_DISCRETES_PKG:body.Adson_Flag := False
2792  2803 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
2793  2804 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
2794  2805 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Inactive
2795  2806 Perf_Background_Dpkg.Pcactorsec:= Secondary
2796  2807 -- Reset Outputs
2797  2808 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
2798  2809 # go
2799  2810 Perf_Dpkg.takeoff_gwt.valid := True
2800  2811 Perf_Dpkg.takeoff_gwt.data := 400.0
2801       ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
      2812 #sba prf_bkgnd_pkg.get_bk_Data #1473
2802  2813 #go
2803  2814 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
2804  2815 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
2805  2816 !run_test()
2806  2817
2807  2818 -- OUTPUTS
2808  2819 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas = 345.0
2809  2820 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach = 0.65
2810  2821 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
2811  2822 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
2812  2823 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
2813  2824 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
2814  2825
2815  2826 -----------------------------------------------------------------------------------------------------------------------
           » --
2816  2827 TESTID: 9
2817  2828
2818  2829     If the current VG CAS and Mach targets are valid, and the flight phase is Descent or Approach, then the Optimum De
           » scent Mach
2819  2830     shall be set as follows:if the flight phase is Descent, then Optimum Descent Mach is set to current VG Mach target
```

```
» ;otherwise,
    if Real-Time computed Economy Descent speeds are invalid, then Optimum Descent Mach is set to MMO.

    the current flight phase is not climb then:
    the real time climb speeds are valid for current working flight plan then Optimum Econ/LRC climb CAS and Mach are
    not set to the real time climb CAS and Mach speeds respectively for the current working flight plan.
    Flag indicating the speed targets from FG are valid (Fgspdsvalid) is not set to False.
    PERF_SDD_2276_INT, PERF_SDD_08226(PERF_SRD_2801,PERF_SRD_23365,PERF_SRD_23455),
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
                   PERF_SRD_10200_INT, PERF_SRD_10199_INT, PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
                   PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.

    PERF_SDD_4328 (PERF_SRD_10166_INT)

    The Tailwind, Crosswind and their validity at destination along the runway axis shall be retrieved
    for the working flight plan.
    PERF_SDD_07188_INT


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Dest_Wind_Components.Dest_Wind_Valid := False
Perf_Background_Dpkg.Dest_Wind_Components.Psvcdu := 0.0
Perf_Background_Dpkg.Dest_Wind_Components.Psvcdy := 0.0
Perf_Retained_Dpkg.Psvcdu(Active).Valid := True
Perf_Retained_Dpkg.Psvcdu(Active).Data := 1.01
Perf_Retained_Dpkg.Psvcdy(Active).Data := 1.01
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Psignorehm := True
```

```
2863   2874 Perf_Background_Dpkg.Pcfltphase := Approach
2864   2875 Perf_Background_Dpkg.Ats_Enable := True
2865   2876 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Approach
2866   2877 Perf_Background_Dpkg.Psacalt := 10000.0
2867   2878 Perf_Database_Dpkg.Psmmo := 0.45
2868   2879 Perf_Background_Dpkg.Pszfw := 300.0
2869   2880 Perf_Background_Dpkg.Psblockfuel := 50.0
2870   2881 Perf_Background_Dpkg.Pstaxifuel := 25.0
2871   2882 Perf_Background_Dpkg.Psairborne := True
2872   2883 Perf_Background_Dpkg.Psautolat := False
2873   2884 Guid_Ext_Dpkg.Gcxxlatautoc := False
2874   2885 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
2875   2886 Perf_Background_Dpkg.Psengout := True
2876   2887 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
2877   2888 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
2878   2889 Perf_Dpkg.Repredict_Hm_Decel := True
2879   2890 Perf_Background_DPkg.Pshmdecel := True
2880   2891 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
2881   2892 Perf_Ads_Dpkg.Fi_Enabled := False
2882   2893 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
2883   2894 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
2884   2895 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
2885   2896 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
2886   2897 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
2887   2898 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
2888   2899 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
2889   2900 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
2890   2901 Perf_Background_Dpkg.Psappspdlat := True
2891   2902 Perf_Dpkg.Pcengoutprds := Altpln
2892   2903 Perf_Background_Dpkg.Pcpathref := Onpath
2893   2904 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
2894   2905 Perf_Background_DPkg.Pscurcas := 5.0
2895   2906 Perf_Background_DPkg.Pscurmach := 5.0
2896   2907 Perf_Background_DPkg.Pscurtas := 5.0
2897   2908 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
2898   2909 Perf_Background_Dpkg.Pstogwtval := False
2899   2910 Perf_Background_Dpkg.Pstogwt := 50.0
2900   2911 Perf_Background_Dpkg.Pcgwind := Invalid
2901   2912 Perf_Background_Dpkg.Psgw := 0.0
2902   2913 Perf_Dpkg.Gross_Weight.Status := Valid
2903   2914 Perf_Dpkg.Gross_Weight.Data := 150.0
2904   2915 Perf_Integration_DPkg.Pcairbrakes := Fullab
2905   2916 Perf_Background_Dpkg.Pcacconfig := 5
2906   2917 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
2907  2918 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
2908  2919 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
2909  2920 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
2910  2921 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
2911  2922 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
2912  2923 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Valid := True
2913  2924 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Cas := 266.0
2914  2925 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Mach := 0.56
2915  2926 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
2916  2927 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas := 267.0
2917  2928 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach := 0.57
2918  2929 Perf_Background_Dpkg.Psstpclbact := True
2919  2930 Perf_Background_Dpkg.Psstpdesact := True
2920  2931 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
2921  2932 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
2922  2933 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
2923  2934 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
2924  2935 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
2925  2936 Perf_Background_Dpkg.Pcprebcalt.Valid := True
2926  2937 Perf_Background_Dpkg.Pcgmttime.Hour := 1
2927  2938 Perf_Background_Dpkg.Pcgmttime.Minute := 1
2928  2939 Perf_Background_Dpkg.Pcgmttime.Second := 1
2929  2940 Perf_Background_Dpkg.Psinertvs := 5.0
2930  2941 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
2931  2942 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
2932  2943 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
2933  2944 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
2934  2945 Perf_Ads_Dpkg.Pr_Enabled := False
2935  2946 ATC_DISCRETES_PKG:body.Adson_Flag := False
2936  2947 Perf_Ads_Dpkg.Ii_Enabled := True
2937  2948 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
2938  2949 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
2939  2950 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Inactive
2940  2951 Perf_Dpkg.takeoff_gwt.valid := True
2941  2952 Perf_Dpkg.takeoff_gwt.data := 400.0
2942  2953 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True
2943  2954 Prf_Bkgnd_Pkg:body.Fgspdsvalid  := True
2944  2955 Perf_Background_Dpkg.Psecncrzmach   := 0.0
2945  2956 Perf_Background_Dpkg.Psecncrzcas  := 0.0
2946  2957 --this breakpoint is set to verify the variables
2947       ~~#sba prf_bkgnd_pkg.get_bk_Data #1041~~
      2958 #sba prf_bkgnd_pkg.get_bk_Data #1048
2948  2959 # go
2949  2960 Perf_Speeds(Active)(Cruise).Valid = TRUE
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
2950  2961 Perf_Speeds(Active)(Climb).Valid = TRUE
2951  2962 Perf_Speeds(Active)(Descent).Valid = TRUE
2952  2963
2953  2964 Perf_Speeds(Active)(Climb).Mach = 0.56
2954  2965 Perf_Speeds(Active)(Climb).Cas = 266.0
2955  2966 Perf_Speeds(Active)(Cruise).Mach = 0.57
2956  2967 Perf_Speeds(Active)(Cruise).Cas = 267.0
2957  2968 Perf_Speeds(Active)(Descent).Mach = 0.55
2958  2969 Perf_Speeds(Active)(Descent).Cas = 265.0
2959  2970
2960  2971 --this breakpoint is set to verify the variables for PERF_SDD_08226
2961       ~~#sba prf_bkgnd_pkg.get_bk_Data #1062~~
      2972 #sba prf_bkgnd_pkg.get_bk_Data #1069
2962  2973 #go
2963  2974 Prf_Bkgnd_Pkg:body.Fgspdsvalid = True
2964  2975
2965  2976 !run_test()
2966  2977
2967  2978 -- OUTPUTS
2968  2979 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas = 345.0
2969  2980 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach = 0.55
2970  2981 Perf_Ads_Dpkg.Ii_Enabled = False
2971  2982 Perf_Ads_Dpkg.Pr_Enabled = False
2972  2983 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
2973  2984 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
2974  2985 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
2975  2986 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
2976  2987 Perf_Background_Dpkg.Dest_Wind_Components.Dest_Wind_Valid := True
2977  2988 Perf_Background_Dpkg.Dest_Wind_Components.Psvcdu := 1.01
2978  2989 Perf_Background_Dpkg.Dest_Wind_Components.Psvcdy := 1.01
2979  2990 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
2980  2991 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
2981  2992 Perf_Background_Dpkg.Psecncrzmach = 0.0
2982  2993 Perf_Background_Dpkg.Psecncrzcas  = 0.0
2983  2994
2984  2995 -----------------------------------------------------------------------------------------------------------------------
           » --
2985  2996 TESTID: 10
2986  2997
2987  2998     If the current VG CAS and Mach targets are valid, and the flight phase is Descent or Approach, then the Optimum De
           » scent Mach
2988  2999     shall be set as follows:if the flight phase is Descent, then Optimum Descent Mach is set to current VG Mach target
           » ;otherwise,
2989  3000     if Real-Time computed Economy Descent speeds are invalid, then Optimum Descent Mach is set to MMO.
```

```
    PERF_SDD_2276_INT, PERF_SDD_2853_INT, PERF_SDD_2293_INT
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
               PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
               PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Pcfltphase := Approach
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Approach
Perf_Background_Dpkg.Psacalt := 10000.0
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := True
Perf_Background_Dpkg.Psautolat := False
Guid_Ext_Dpkg.Gcxxlatautoc := False
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
Perf_Background_Dpkg.Psengout := True
Cdk_Vert_Dpkg:Body.Engine_Out_I := True
Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
Perf_Dpkg.Repredict_Hm_Decel := True
Perf_Background_DPkg.Pshmdecel := True
Perf_Background_Dpkg.Pcholdflags.Hmactive := True
Perf_Ads_Dpkg.Fi_Enabled := False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
3034  3045 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
3035  3046 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
3036  3047 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
3037  3048 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
3038  3049 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
3039  3050 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
3040  3051 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
3041  3052 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
3042  3053 Perf_Background_Dpkg.Psappspdlat := True
3043  3054 Perf_Dpkg.Pcengoutprds := Altpln
3044  3055 Perf_Background_Dpkg.Pcpathref := Onpath
3045  3056 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
3046  3057 Perf_Background_DPkg.Pscurcas := 5.0
3047  3058 Perf_Background_DPkg.Pscurmach := 5.0
3048  3059 Perf_Background_DPkg.Pscurtas := 5.0
3049  3060 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
3050  3061 Perf_Background_Dpkg.Pstogwtval := False
3051  3062 Perf_Background_Dpkg.Pstogwt := 50.0
3052  3063 Perf_Background_Dpkg.Pcgwind := Invalid
3053  3064 Perf_Background_Dpkg.Psgw := 0.0
3054  3065 Perf_Dpkg.Gross_Weight.Status := Valid
3055  3066 Perf_Dpkg.Gross_Weight.Data := 150.0
3056  3067 Perf_Integration_DPkg.Pcairbrakes := Fullab
3057  3068 Perf_Background_Dpkg.Pcacconfig := 5
3058  3069 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
3059  3070 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
3060  3071 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
3061  3072 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
3062  3073 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
3063  3074 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
3064  3075 Perf_Background_Dpkg.Psstpclbact := True
3065  3076 Perf_Background_Dpkg.Psstpdesact := True
3066  3077 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
3067  3078 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
3068  3079 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
3069  3080 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
3070  3081 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
3071  3082 Perf_Background_Dpkg.Pcprebcalt.Valid := True
3072  3083 Perf_Background_Dpkg.Pcgmttime.Hour := 1
3073  3084 Perf_Background_Dpkg.Pcgmttime.Minute := 1
3074  3085 Perf_Background_Dpkg.Pcgmttime.Second := 1
3075  3086 Perf_Background_Dpkg.Psinertvs := 5.0
3076  3087 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
3077  3088 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
3078   3089 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
3079   3090 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
3080   3091 Perf_Ads_Dpkg.Pr_Enabled := False
3081   3092 ATC_DISCRETES_PKG:body.Adson_Flag := False
3082   3093 Perf_Ads_Dpkg.Ii_Enabled := True
3083   3094 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
3084   3095 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
3085   3096 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Inactive
3086   3097 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
3087   3098 # go
3088   3099 Perf_Dpkg.takeoff_gwt.valid := True
3089   3100 Perf_Dpkg.takeoff_gwt.data := 400.0
3090        ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
       3101 #sba prf_bkgnd_pkg.get_bk_Data #1473
3091   3102 #go
3092   3103 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
3093   3104 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
3094   3105 #delb/all
3095   3106 !run_test()
3096   3107 
3097   3108 -- OUTPUTS
3098   3109 
3099   3110 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas = 345.0
3100   3111 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach = 0.45
3101   3112 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec = False
3102   3113 Perf_Ads_Dpkg.Ii_Enabled = False
3103   3114 Perf_Ads_Dpkg.Pr_Enabled = False
3104   3115 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
3105   3116 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
3106   3117 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
3107   3118 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
3108   3119 
3109   3120 -----------------------------------------------------------------------------------------------------------------------
            » --
3110   3121 TESTID: 11
3111   3122 
3112   3123     Verify that for a secondary flight plan relevant plags are set so HM legs will be ignored.  Also, when current iti
            » n is
3113   3124     active primary flight plan preds and ADS enabled flag is true Get_Requested_Num_Waypoints is called.
3114   3125     PERF_SDD_4795(PERF_SRD_1590, PERF_SRD_6012), PERF_SDD_3482_INT, PERF_SDD_2852_INT, PERF_SDD_2174_INT, PERF_SDD_217
            » 7_INT,
3115   3126     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
3116   3127     PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
3117   3128     PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
```

```

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    The GMT time snapshot taken at the beginning of the pass of predictions is stored with the Perf ADS Predicted Rout
» e
    information for use as the Predictions Reference GMT.
    PERF_SDD_3718 (PERF_SRD_8964_INT)

    The number of requested Predicted Route waypoints is 0 (Zero) and valid Predicted data resides in the Predicted Ro
» ute
    Buffer. Verify the Perf Predicted Route Buffer is invalidated and stored into the ADS Interface for IO's use.
    PERF_SDD_3887 (PERF_SRD_8976_INT)

    If the current itinerary is one of the following:
    - Active Primary Flight Plan Predictions;
    - Temporary Primary Flight Plan Predictions;
    -Current mode predictions(Normal or High priority);
    - Optimum altitude predictions;
    then the descent path shall be retrieved from the descent path object
    manager via a call to Perf_Ext_Despath.Pgvdespath.
    PERF_SDD_3888_INT

    If there is no speed mode valid, then speed mode shall be set to economy mode.
    PERF_SDD_07546_INT


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Pcactorsec := Secondary
Perf_Background_Dpkg.Psignorehm := False
Perf_Background_Dpkg.Flight_Plan_Type := Copy_From_Active
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
3160  3171 Perf_Background_Dpkg.Pcfltphase := Approach
3161  3172 Perf_Background_Dpkg.Ats_Enable := True
3162  3173 Perf_Background_Dpkg.Pcitin.Flight_Plan := Active
3163  3174 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Approach
3164  3175 Perf_Background_Dpkg.Psacalt := 10000.0
3165  3176 Perf_Database_Dpkg.Psmmo := 0.45
3166  3177 Perf_Background_Dpkg.Pszfw := 300.0
3167  3178 Perf_Background_Dpkg.Psblockfuel := 50.0
3168  3179 Perf_Background_Dpkg.Pstaxifuel := 25.0
3169  3180 Perf_Background_Dpkg.Psairborne := True
3170  3181 Perf_Background_Dpkg.Psautolat := False
3171  3182 Guid_Ext_Dpkg.Gcxxlatautoc := False
3172  3183 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
3173  3184 Perf_Background_Dpkg.Psengout := True
3174  3185 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
3175  3186 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
3176  3187 Perf_Dpkg.Repredict_Hm_Decel := True
3177  3188 Perf_Background_DPkg.Pshmdecel := True
3178  3189 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
3179  3190 Perf_Ads_Dpkg.Fi_Enabled := False
3180  3191 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
3181  3192 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
3182  3193 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
3183  3194 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
3184  3195 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
3185  3196 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
3186  3197 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
3187  3198 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
3188  3199 Perf_Background_Dpkg.Psappspdlat := True
3189  3200 Perf_Dpkg.Pcengoutprds := Altpln
3190  3201 Perf_Background_Dpkg.Pcpathref := Onpath
3191  3202 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
3192  3203 Perf_Background_DPkg.Pscurcas := 5.0
3193  3204 Perf_Background_DPkg.Pscurmach := 5.0
3194  3205 Perf_Background_DPkg.Pscurtas := 5.0
3195  3206 Perf_Background_Dpkg.Pcitin.Itinerary := Prim_Fpln_Preds
3196  3207 Perf_Background_Dpkg.Psenginesoff := True
3197  3208 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
3198  3209 Perf_Background_Dpkg.Pstogwtval := False
3199  3210 Perf_Background_Dpkg.Pstogwt := 50.0
3200  3211 Perf_Background_Dpkg.Pcgwind := Invalid
3201  3212 Perf_Background_Dpkg.Psgw := 0.0
3202  3213 Perf_Dpkg.Gross_Weight.Status := Valid
3203  3214 Perf_Dpkg.Gross_Weight.Data := 150.0
```

```
3204  3215 Perf_Integration_DPkg.Pcairbrakes := Fullab
3205  3216 Perf_Background_Dpkg.Pcacconfig := 5
3206  3217 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
3207  3218 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
3208  3219 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
3209  3220 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
3210  3221 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
3211  3222 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
3212  3223 Perf_Background_Dpkg.Psstpclbact := True
3213  3224 Perf_Background_Dpkg.Psstpdesact := True
3214  3225 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
3215  3226 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
3216  3227 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
3217  3228 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
3218  3229 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
3219  3230 Perf_Background_Dpkg.Pcprebcalt.Valid := True
3220  3231 Perf_Background_Dpkg.Pcgmttime.Hour := 1
3221  3232 Perf_Background_Dpkg.Pcgmttime.Minute := 1
3222  3233 Perf_Background_Dpkg.Pcgmttime.Second := 1
3223  3234 Perf_Background_Dpkg.Psinertvs := 5.0
3224  3235 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
3225  3236 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
3226  3237 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
3227  3238 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
3228  3239 Perf_Ads_Dpkg.Pr_Enabled := False
3229  3240 ATC_DISCRETES_PKG:body.Adson_Flag := False
3230  3241 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid := True
3231  3242
3232  3243 Perf_Ads_Dpkg.Ii_Enabled := True
3233  3244 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
3234  3245 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
3235  3246 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
3236  3247 ^Noise_Speed_Val := False
3237  3248 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints := (5)
3238  3249 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas := 330.0
3239  3250 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt := 15500.0
3240  3251 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type := Vg_Ext_Tpkg.Des_Spd_Lim
3241  3252 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident := "ABCDEFG"
3242  3253 Perf_Dpkg.takeoff_gwt.valid := True
3243  3254 Perf_Dpkg.takeoff_gwt.data := 400.0
3244  3255
3245  3256 -- Reset Output
3246  3257 Perf_Background_Dpkg.Speed_Annunciation.Cas             := 0.0
3247  3258 Perf_Background_Dpkg.Speed_Annunciation.Alt             := 0.0
```

```
Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  := Vg_Ext_Tpkg.Invalid
Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       := "       "
Perf_Background_Dpkg.Pcholdflags.Consider_Hm            := True
Perf_Background_Dpkg.Psconsider_Hm                      := True
Perf_Background_Dpkg.Pshxpxdecel                        := True
--this breakpoint is set to verify the local variable
#sba prf_bkgnd_pkg.get_bk_Data before_end begin
Requested_Pred_Route = 5
# go
# end
#delb/all

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Pcholdflags.Hmdecel     = False
Perf_Background_Dpkg.Pcholdflags.Consider_Hm = False
Perf_Background_Dpkg.Pcholdflags.Hmactive    = False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn   = False
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel   = False
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv   = False
Perf_Background_Dpkg.Pcholdflags.Hmdistval   = False
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim     = False
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim    = False
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel   = False
Perf_Background_DPkg.Pshmdecel               = False
Perf_Background_Dpkg.Psappspdlat             = False
Perf_Background_Dpkg.Psconsider_Hm           = False
Perf_Background_Dpkg.Pshxpxdecel             = False
Perf_Background_Dpkg.Psignorehm              = True
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec = True
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints = 5
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints = 0
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points = 0
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points = 2
Perf_Ads_Dpkg.Ii_Enabled = False
Perf_Ads_Dpkg.Pr_Enabled = True
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
Perf_Background_Dpkg.Speed_Annunciation.Cas             = 330.0
Perf_Background_Dpkg.Speed_Annunciation.Alt             = 15500.0
Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  = Vg_Ext_Tpkg.Des_Spd_Lim
Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       = "ABCDEFG"
CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec = True
Perf_Background_Dpkg.Pcspeedmode = Perf_Ext_Tpkg.Vmecon

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 12

    ADS Enabled flag is set for Intermediate Intent Buffer Predictions.
    PERF_SDD_2123_INT, PERF_SDD_2174_INT, PERF_SDD_2177_INT
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
               PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
               PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    The GMT time snapshot taken at the beginning of the pass of predictions is stored with the Perf ADS Predicted Rout
» e
    information for use as the Predictions Reference GMT.
    PERF_SDD_3718 (PERF_SRD_8964_INT)

    The number of requested Predicted Route waypoints is 0 (Zero) and valid Predicted data resides in the Predicted Ro
» ute
    Buffer. Verify the Perf Predicted Route Buffer is invalidated and stored into the ADS Interface for IO's use.
    PERF_SDD_3887 (PERF_SRD_8976_INT)

    If all of the following conditions are met, the number of requested Intermediate Intent Waypoints shall be set to
» maximum
      number of intermediate intent points(10) and number of predicted Intermediate Intent Waypoints is set to zero:
      The current itinerary is Active Primary Flight Plan Predictions
      This is not the first pass of active primary flight plan predictions
      OPC ATS-enabled flag is true
      ADS ON is true
    PERF_SDD_07160_INT


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
 3332   3343 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
 3333   3344 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
 3334   3345 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
 3335   3346 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
 3336   3347 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
 3337   3348 Perf_Dpkg.Min_Gwt := 100.0
 3338   3349 Perf_Dpkg.Max_Gwt := 400.0
 3339   3350 Perf_Background_Dpkg.Pcactorsec := Secondary
 3340   3351 Perf_Background_Dpkg.Psignorehm := True
 3341   3352 Perf_Background_Dpkg.Flight_Plan_Type := Copy_From_Active
 3342   3353 Perf_Background_Dpkg.Pcfltphase := Approach
 3343   3354 Perf_Background_Dpkg.Ats_Enable := True
 3344   3355 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Approach
 3345   3356 Perf_Background_Dpkg.Psacalt := 10000.0
 3346   3357 Perf_Database_Dpkg.Psmmo := 0.45
 3347   3358 Perf_Background_Dpkg.Pszfw := 300.0
 3348   3359 Perf_Background_Dpkg.Psblockfuel := 50.0
 3349   3360 Perf_Background_Dpkg.Pstaxifuel := 25.0
 3350   3361 Perf_Background_Dpkg.Psairborne := True
 3351   3362 Perf_Background_Dpkg.Psautolat := False
 3352   3363 Guid_Ext_Dpkg.Gcxxlatautoc := True
 3353   3364 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
 3354   3365 Perf_Background_Dpkg.Psengout := True
 3355   3366 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
 3356   3367 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
 3357   3368 Perf_Dpkg.Repredict_Hm_Decel := True
 3358   3369 Perf_Background_DPkg.Pshmdecel := True
 3359   3370 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
 3360   3371 Perf_Ads_Dpkg.Fi_Enabled := True
 3361   3372 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
 3362   3373 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
 3363   3374 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
 3364   3375 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
 3365   3376 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
 3366   3377 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
 3367   3378 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
 3368   3379 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
 3369   3380 Perf_Background_Dpkg.Psappspdlat := True
 3370   3381 Perf_Dpkg.Pcengoutprds := Altpln
 3371   3382 Perf_Background_Dpkg.Pcpathref := Onpath
 3372   3383 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
 3373   3384 Perf_Background_DPkg.Pscurcas := 5.0
 3374   3385 Perf_Background_DPkg.Pscurmach := 5.0
 3375   3386 Perf_Background_DPkg.Pscurtas := 5.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
3376   3387 Perf_Background_Dpkg.Pcitin.Itinerary := Prim_Fpln_Preds
3377   3388 Perf_Background_Dpkg.Psenginesoff := True
3378   3389 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
3379   3390 Perf_Background_Dpkg.Pstogwtval := False
3380   3391 Perf_Background_Dpkg.Pstogwt := 50.0
3381   3392 Perf_Background_Dpkg.Pcgwind := Invalid
3382   3393 Perf_Background_Dpkg.Psgw := 0.0
3383   3394 Perf_Dpkg.Gross_Weight.Status := Valid
3384   3395 Perf_Dpkg.Gross_Weight.Data := 150.0
3385   3396 Perf_Integration_DPkg.Pcairbrakes := Fullab
3386   3397 Perf_Background_Dpkg.Pcacconfig := 5
3387   3398 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
3388   3399 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
3389   3400 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 400.0
3390   3401 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
3391   3402 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
3392   3403 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
3393   3404 Perf_Background_Dpkg.Psstpclbact := True
3394   3405 Perf_Background_Dpkg.Psstpdesact := True
3395   3406 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
3396   3407 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
3397   3408 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
3398   3409 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
3399   3410 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
3400   3411 Perf_Background_Dpkg.Pcprebcalt.Valid := True
3401   3412 Perf_Background_Dpkg.Pcgmttime.Hour := 1
3402   3413 Perf_Background_Dpkg.Pcgmttime.Minute := 1
3403   3414 Perf_Background_Dpkg.Pcgmttime.Second := 1
3404   3415 Perf_Background_Dpkg.Psinertvs := 5.0
3405   3416 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
3406   3417 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
3407   3418 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
3408   3419 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
3409   3420 Perf_Ads_Dpkg.Pr_Enabled := False
3410   3421 ATC_DISCRETES_PKG:body.Adson_Flag := True
3411   3422 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid := True
3412   3423
3413   3424 Perf_Ads_Dpkg.Ii_Enabled := False
3414   3425 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
3415   3426 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
3416   3427 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
3417   3428 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints := (5)
3418   3429 Perf_Dpkg.takeoff_gwt.valid := True
3419   3430 Perf_Dpkg.takeoff_gwt.data := 400.0
```

```

--this breakpoint is set to verify the local variable
#sba prf_bkgnd_pkg.get_bk_Data before_end begin
Requested_Pred_Route = 5
# go
# end
#delb/all
!run_test()

-- OUTPUTS

Perf_Background_Dpkg.Pcholdflags.Hmactive = False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn = False
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel = False
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv = False
Perf_Background_Dpkg.Pcholdflags.Hmdistval = False
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim = False
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim = False
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel = False
Perf_Background_DPkg.Pshmdecel = False
Perf_Background_Dpkg.Psappspdlat = False
Perf_Background_Dpkg.Psignorehm = True
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec = True
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints = 5
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints = 0
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points = 10
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points = 0
Perf_Ads_Dpkg.Ii_Enabled = True
Perf_Ads_Dpkg.Pr_Enabled = True
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True


-----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 13

    A/C is in Cruise and current itin is active primary so target speed is limited by calling the speed envelope modul
» e.
    PERF_SDD_3055_INT, PERF_SDD_2174_INT, PERF_SDD_2177_INT
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
               PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
               PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    The GMT time snapshot taken at the beginning of the pass of predictions is stored with the Perf ADS Predicted Rout
» e
    information for use as the Predictions Reference GMT.
    PERF_SDD_3718 (PERF_SRD_8964_INT)

    The number of requested Predicted Route waypoints is 0 (Zero) and valid Predicted data resides in the Predicted Ro
» ute
    Buffer. Verify the Perf Predicted Route Buffer is invalidated and stored into the ADS Interface for IO's use.
    PERF_SDD_3887 (PERF_SRD_8976_INT)

    If all of the following conditions are met, the number of requested Intermediate Intent Waypoints shall be set to
» maximum
      number of intermediate intent points(10) and number of predicted Intermediate Intent Waypoints is set to zero:
      The current itinerary is Active Primary Flight Plan Predictions
      This is not the first pass of active primary flight plan predictions
      OPC ATS-enabled flag is true
      ADS ON is true
    PERF_SDD_07160_INT


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Pcactorsec := Secondary
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Flight_Plan_Type := Copy_From_Active
Perf_Background_Dpkg.Pcfltphase := Approach
Perf_Background_Dpkg.Ats_Enable := True
```

```
3503   3514 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
3504   3515 Perf_Background_Dpkg.Psacalt := 10000.0
3505   3516 Perf_Database_Dpkg.Psmmo := 0.45
3506   3517 Perf_Background_Dpkg.Pszfw := 300.0
3507   3518 Perf_Background_Dpkg.Psblockfuel := 50.0
3508   3519 Perf_Background_Dpkg.Pstaxifuel := 25.0
3509   3520 Perf_Background_Dpkg.Psairborne := True
3510   3521 Perf_Background_Dpkg.Psautolat := False
3511   3522 Guid_Ext_Dpkg.Gcxxlatautoc := True
3512   3523 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
3513   3524 Perf_Background_Dpkg.Psengout := True
3514   3525 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
3515   3526 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
3516   3527 Perf_Dpkg.Repredict_Hm_Decel := True
3517   3528 Perf_Background_DPkg.Pshmdecel := True
3518   3529 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
3519   3530 Perf_Ads_Dpkg.Fi_Enabled := false
3520   3531 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
3521   3532 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
3522   3533 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
3523   3534 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
3524   3535 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
3525   3536 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
3526   3537 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
3527   3538 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
3528   3539 Perf_Background_Dpkg.Psappspdlat := True
3529   3540 Perf_Dpkg.Pcengoutprds := Altpln
3530   3541 Perf_Background_Dpkg.Pcpathref := Onpath
3531   3542 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
3532   3543 Perf_Background_DPkg.Pscurcas := 5.0
3533   3544 Perf_Background_DPkg.Pscurmach := 5.0
3534   3545 Perf_Background_DPkg.Pscurtas := 5.0
3535   3546 Perf_Background_Dpkg.Pcitin.Itinerary := Prim_Fpln_Preds
3536   3547 Perf_Background_Dpkg.Psenginesoff := True
3537   3548 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
3538   3549 Perf_Background_Dpkg.Pstogwtval := False
3539   3550 Perf_Background_Dpkg.Pstogwt := 50.0
3540   3551 Perf_Background_Dpkg.Pcgwind := Invalid
3541   3552 Perf_Background_Dpkg.Psgw := 0.0
3542   3553 Perf_Dpkg.Gross_Weight.Status := Valid
3543   3554 Perf_Dpkg.Gross_Weight.Data := 150.0
3544   3555 Perf_Integration_DPkg.Pcairbrakes := Fullab
3545   3556 Perf_Background_Dpkg.Pcacconfig := 5
3546   3557 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 400.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
Perf_Background_Dpkg.Psstpclbact := True
Perf_Background_Dpkg.Psstpdesact := True
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
Perf_Background_Dpkg.Pccuraltcstr.Valid := True
Perf_Background_Dpkg.Pcprebcalt.Valid := True
Perf_Background_Dpkg.Pcgmttime.Hour := 1
Perf_Background_Dpkg.Pcgmttime.Minute := 1
Perf_Background_Dpkg.Pcgmttime.Second := 1
Perf_Background_Dpkg.Psinertvs := 5.0
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
Perf_Ads_Dpkg.Pr_Enabled := False
ATC_DISCRETES_PKG:body.Adson_Flag := True
Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid := True
Perf_Background_Dpkg.Pcitin.Flight_Plan := Active
Perf_Ads_Dpkg.Ii_Enabled := False
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints := (0)
Perf_Dpkg.takeoff_gwt.valid := True
Perf_Dpkg.takeoff_gwt.data := 400.0

--this breakpoint is set to verify the local variable
#sba prf_bkgnd_pkg.get_bk_Data before_end begin
Requested_Pred_Route = 0
# go
# end
#delb/all

!run_test()

-- OUTPUTS

```

```
Perf_Background_Dpkg.Pcholdflags.Hmactive = False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn = False
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel = False
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv = False
Perf_Background_Dpkg.Pcholdflags.Hmdistval = False
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim = False
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim = False
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel = False
Perf_Background_DPkg.Pshmdecel = False
Perf_Background_Dpkg.Psappspdlat = False
Perf_Background_Dpkg.Psignorehm = True
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec = True
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints = 0
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints = 0
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points = 10
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points = 0
Perf_Ads_Dpkg.Ii_Enabled = False
Perf_Ads_Dpkg.Pr_Enabled = False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = True
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 14

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
3634   3645 Perf_Dpkg.Max_Gwt := 400.0
3635   3646 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
3636   3647 Perf_Background_Dpkg.Psignorehm := True
3637   3648 Perf_Background_Dpkg.Ats_Enable := True
3638   3649 Perf_Background_Dpkg.Psautolat := False
3639   3650 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
3640   3651 Perf_Background_Dpkg.Psengout := True
3641   3652 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
3642   3653 Perf_Background_DPkg.Pscurcas := 5.0
3643   3654 Perf_Background_DPkg.Pscurmach := 5.0
3644   3655 Perf_Background_DPkg.Pscurtas := 5.0
3645   3656 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
3646   3657 Perf_Background_Dpkg.Pstogwtval := False
3647   3658 Perf_Background_Dpkg.Pstogwt := 50.0
3648   3659 Perf_Background_Dpkg.Pcgwind := Invalid
3649   3660 Perf_Background_Dpkg.Psgw := 0.0
3650   3661 Perf_Dpkg.Gross_Weight.Status := Valid
3651   3662 Perf_Dpkg.Gross_Weight.Data := 150.0
3652   3663 Perf_Integration_DPkg.Pcairbrakes := Fullab
3653   3664 Perf_Background_Dpkg.Pcacconfig := 5
3654   3665 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
3655   3666 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
3656   3667 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
3657   3668 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
3658   3669 Perf_Background_Dpkg.Psstpclbact := True
3659   3670 Perf_Background_Dpkg.Psstpdesact := True
3660   3671 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
3661   3672 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
3662   3673 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
3663   3674 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
3664   3675 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
3665   3676 Perf_Background_Dpkg.Pcprebcalt.Valid := True
3666   3677 Perf_Background_Dpkg.Pcgmttime.Hour := 1
3667   3678 Perf_Background_Dpkg.Pcgmttime.Minute := 1
3668   3679 Perf_Background_Dpkg.Pcgmttime.Second := 1
3669   3680 Perf_Background_Dpkg.Psinertvs := 5.0
3670   3681 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
3671   3682 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
3672   3683 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
3673   3684 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
3674   3685 Perf_Ads_Dpkg.Pr_Enabled := False
3675   3686 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
3676   3687 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
3677   3688 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
#sba prf_bkgnd_pkg.get_bk_Data after_elaboration
# go
Perf_Dpkg.takeoff_gwt.valid := True
Perf_Dpkg.takeoff_gwt.data := 400.0
#DELB/ALL
~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
#sba prf_bkgnd_pkg.get_bk_Data #1473
#go
Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
!run_test()

-- OUTPUTS

Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 15

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Ats_Enable := True
Perf_Background_Dpkg.Psautolat := False
```

```
3720   3731 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
3721   3732 Perf_Background_Dpkg.Psengout := True
3722   3733 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
3723   3734 Perf_Background_DPkg.Pscurcas := 5.0
3724   3735 Perf_Background_DPkg.Pscurmach := 5.0
3725   3736 Perf_Background_DPkg.Pscurtas := 5.0
3726   3737 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
3727   3738 Perf_Background_Dpkg.Pstogwtval := False
3728   3739 Perf_Background_Dpkg.Pstogwt := 50.0
3729   3740 Perf_Background_Dpkg.Pcgwind := Invalid
3730   3741 Perf_Background_Dpkg.Psgw := 0.0
3731   3742 Perf_Dpkg.Gross_Weight.Status := Valid
3732   3743 Perf_Dpkg.Gross_Weight.Data := 150.0
3733   3744 Perf_Integration_DPkg.Pcairbrakes := Fullab
3734   3745 Perf_Background_Dpkg.Pcacconfig := 5
3735   3746 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
3736   3747 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
3737   3748 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
3738   3749 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
3739   3750 Perf_Background_Dpkg.Psstpclbact := True
3740   3751 Perf_Background_Dpkg.Psstpdesact := True
3741   3752 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
3742   3753 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
3743   3754 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
3744   3755 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
3745   3756 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
3746   3757 Perf_Background_Dpkg.Pcprebcalt.Valid := True
3747   3758 Perf_Background_Dpkg.Pcgmttime.Hour := 1
3748   3759 Perf_Background_Dpkg.Pcgmttime.Minute := 1
3749   3760 Perf_Background_Dpkg.Pcgmttime.Second := 1
3750   3761 Perf_Background_Dpkg.Psinertvs := 5.0
3751   3762 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
3752   3763 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
3753   3764 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
3754   3765 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
3755   3766 Perf_Ads_Dpkg.Pr_Enabled := False
3756   3767 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
3757   3768 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
3758   3769 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
3759   3770 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
3760   3771 # go
3761   3772 Perf_Dpkg.takeoff_gwt.valid := True
3762   3773 Perf_Dpkg.takeoff_gwt.data := 400.0
3763   3774 #DELB/ALL
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
3764      ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
     3775 #sba prf_bkgnd_pkg.get_bk_Data #1473
3765 3776 #go
3766 3777 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
3767 3778 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
3768 3779 !run_test()
3769 3780 
3770 3781 -- Outputs
3771 3782 
3772 3783 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
3773 3784 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
3774 3785 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
3775 3786 
3776 3787 -----------------------------------------------------------------------------------------------------------------------
          » --
3777 3788 TESTID: 16
3778 3789 
3779 3790     If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
3780 3791    - Perf hold flag record (Pcholdflags) is copied from guidance
3781 3792    - Descent limit latch record (Pcdeslimlat) is copied from guidance.
3782 3793    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
          » h.
3783 3794    - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
          »  considers
3784 3795      the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
3785 3796    - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
          »  HM if no
3786 3797      deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
          » lear the HM
3787 3798      leg deleted while in decel to HM flag (Pshmdeleted).
3788 3799    - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
          » d, and the
3789 3800      HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
          » t is within
3790 3801      the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
3791 3802    - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
          » l to HM,
3792 3803      then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false.
3793 3804      PERF_SDD_4794_INT
3794 3805 
3795 3806     If Guidance considers the aircraft to be in a HA/HF deceleration, then flag indicating that the aircraft is within
3796 3807     the HA/HF decel zone is set to true. Otherwise, it is set to false.
3797 3808     PERF_SDD_4778_INT
3798 3809 
```

```
3799  3810     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
3800  3811     working flight plan.
3801  3812     PERF_SDD_4328 (PERF_SRD_10166_INT)
3802  3813
3803  3814     ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is th
           » e first pass
3804  3815     of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
3805  3816     PERF_SDD_08225_INT
3806  3817     --In this test case, it is manual speed mode and flight phase is Approach but this is not the first pass
3807  3818
3808  3819     In this case, the working flight plan is Active,we set the corresponding condition and verify:
3809  3820     (1)Perf hold flag record (Pcholdflags) is copied from guidance
3810  3821     (2)Descent limit latch record (Pcdeslimlat) is copied from guidance
3811  3822     (3)Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true
3812  3823     (4)the re-evaluation indication flag is cleared (Repredict_Hm_Decel) (F,T)
3813  3824     (5)clear the HM leg deleted while in decel to HM flag (Pshmdeleted)  (F,F,T)
3814  3825     (6)flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
           » e (F,F,F)
3815  3826     (7)flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to false (F, F)
3816  3827     (8)Flag indicating that the aircraft is within the HA/HF decel zone (Pshxpxdecel) is set to false.
3817  3828
3818  3829 REQUIREMENTS UNDER EVALUATION :PERF_SDD_4794_INT,PERF_SDD_4778_INT,PERF_SDD_4328 (PERF_SRD_10166_INT),PERF_SDD_08225_I
           » NT
3819  3830
3820  3831
3821  3832 -- INPUTS
3822  3833 Perf_Dpkg.takeoff_gwt.valid := True
3823  3834 Perf_Dpkg.takeoff_gwt.data  := 400.0
3824  3835 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
3825  3836 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
3826  3837 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
3827  3838 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
3828  3839 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
3829  3840 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
3830  3841 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
3831  3842 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
3832  3843 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
3833  3844 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
3834  3845 Perf_Dpkg.Min_Gwt := 100.0
3835  3846 Perf_Dpkg.Max_Gwt := 400.0
3836  3847 Perf_Background_Dpkg.Pcactorsec := Active
3837  3848 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
3838  3849 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase := Approach --Perf_Background_Dpkg.Pcfltphase
3839  3850 Perf_Background_Dpkg.Psignorehm := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
3840  3851 Perf_Background_Dpkg.Ats_Enable := True
3841  3852 Perf_Background_Dpkg.Psautolat := False
3842  3853 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
3843  3854 Perf_Background_Dpkg.Psengout := True
3844  3855 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
3845  3856 Perf_Dpkg.Repredict_Hm_Decel := True
3846  3857 Perf_Background_DPkg.Pscurcas := 5.0
3847  3858 Perf_Background_DPkg.Pscurmach := 5.0
3848  3859 Perf_Background_DPkg.Pscurtas := 5.0
3849  3860 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
3850  3861 Perf_Background_Dpkg.Pstogwtval := False
3851  3862 Perf_Background_Dpkg.Pstogwt := 50.0
3852  3863 Perf_Background_Dpkg.Pcgwind := Invalid
3853  3864 Perf_Background_Dpkg.Psgw := 0.0
3854  3865 Perf_Dpkg.Gross_Weight.Status := Valid
3855  3866 Perf_Dpkg.Gross_Weight.Data := 150.0
3856  3867 Perf_Integration_DPkg.Pcairbrakes := Fullab
3857  3868 Perf_Background_Dpkg.Pcacconfig := 5
3858  3869 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
3859  3870 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
3860  3871 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
3861  3872 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
3862  3873 Perf_Background_Dpkg.Psstpclbact := True
3863  3874 Perf_Background_Dpkg.Psstpdesact := True
3864  3875 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
3865  3876 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
3866  3877 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
3867  3878 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
3868  3879 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
3869  3880 Perf_Background_Dpkg.Pcprebcalt.Valid := True
3870  3881 Perf_Background_Dpkg.Pcgmttime.Hour := 1
3871  3882 Perf_Background_Dpkg.Pcgmttime.Minute := 1
3872  3883 Perf_Background_Dpkg.Pcgmttime.Second := 1
3873  3884 Perf_Background_Dpkg.Psinertvs := 5.0
3874  3885 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
3875  3886 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
3876  3887 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
3877  3888 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
3878  3889 Perf_Ads_Dpkg.Pr_Enabled := False
3879  3890 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
3880  3891 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
3881  3892 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Inactive
3882  3893 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive  := True
3883  3894 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel   := False --Perf_Background_Dpkg.Pcholdflags.Hmdecel
```

```
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm := false
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim    := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim   := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel  := True
Perf_Dpkg.Pshmdeleted := True
Perf_Dpkg.Pcfirstpred(Active)   := false
Guid_Ext_Dpkg.Va3vertmde       := Perf_Ext_Tpkg.Vmspd
CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 50010
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected :=
» true
CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt   :=25001.1
Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt := 25001.0

-- initlize the output value
Perf_Background_Dpkg.Pcholdflags.Hmactive           := False
Perf_Background_Dpkg.Pcholdflags.Hmdecel            := True
Perf_Background_Dpkg.Pcholdflags.Manhmwarn          := True
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel          := True
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv          := True
Perf_Background_Dpkg.Pcholdflags.Hmdistval          := True
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim            := False
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim           := False
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel          := False
Perf_Dpkg.Pshmdeleted                               := True
Perf_Background_Dpkg.Pcholdflags.Consider_Hm        := True
Perf_Background_Dpkg.Psappspdlat                    := False
Perf_Background_Dpkg.Noise_Data.Altitude.Valid      := True
Perf_Background_Dpkg.Noise_Data.Speed.Valid         := True
Perf_Background_Dpkg.Pshmdecel                      := True
Perf_Background_Dpkg.Psconsider_Hm                  := True
Perf_Background_Dpkg.Pshxpxdecel                    := True
Perf_Background_Dpkg.Pcspeedmode                    := Perf_Ext_Tpkg.Vmecon

!run_test()

```

```
-- OUTPUTS
Perf_Dpkg.Repredict_Hm_Decel                   = False
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai       = True
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai         = True
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond        = True
Perf_Background_Dpkg.Pcholdflags.Hmactive      = True
Perf_Background_Dpkg.Pcholdflags.Hmdecel       = False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn     = False
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel     = False
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv     = False
Perf_Background_Dpkg.Pcholdflags.Hmdistval     = False
Perf_Background_Dpkg.Pcholdflags.Consider_Hm   = False
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim       = True
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim      = True
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel     = True
Perf_Dpkg.Pshmdeleted                          = False
Perf_Background_Dpkg.Pshmdecel                 = false
Perf_Background_Dpkg.Psappspdlat               = True
Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
Perf_Background_Dpkg.Noise_Data.Speed.Valid    = False
Perf_Background_Dpkg.Psconsider_Hm             = False
Perf_Background_Dpkg.Pshxpxdecel               = False
Perf_Background_Dpkg.Pcspeedmode               /= Perf_Ext_Tpkg.Vmecon
----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 17

     If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
   - Perf hold flag record (Pcholdflags) is copied from guidance
   - Descent limit latch record (Pcdeslimlat) is copied from guidance.
   - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
» h.
   - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
»  considers
     the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
   - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
»  HM if no
     deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
» lear the HM
     leg deleted while in decel to HM flag (Pshmdeleted).
   - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
» d, and the
     HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
» t is within
```

```
     the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
   - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
» l to HM,
     then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
    PERF_SDD_4794_INT
    If Guidance considers the aircraft to be in a HA/HF deceleration, then flag indicating that the aircraft is within
    the HA/HF decel zone is set to true. Otherwise, it is set to false.
    PERF_SDD_4778_INT

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    This test case Stores the noise data from the Active Flight Plan when the working flight plan is a Temporary fligh
» t plan
    as per the change in the Anchor. PERF_SDD_4327(PERF_SRD_12370_INT, PERF_SRD_12404, PERF_SRD_10166_INT)

    This test case verify:
    (1)Perf hold flag record (Pcholdflags) is copied from guidance
    (2)Descent limit latch record (Pcdeslimlat) is copied from guidance
    (3)Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false
    (4)the re-evaluation indication flag is not cleared (Repredict_Hm_Decel not false) (T,T)
    (5)HM leg deleted is not cleared while in decel to HM flag (Pshmdeleted)  (T,F,T)
    (6)Flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to false (T, T)
    (7)flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
» e (F,T,T)
    (8)Flag indicating that the aircraft is within the HA/HF decel zone (Pshxpxdecel) is set to True.

REQUIREMENTS UNDER EVALUATION : PERF_SDD_4794_INT, PERF_SDD_4778_INT,PERF_SDD_4328 (PERF_SRD_10166_INT)
                                PERF_SDD_4327(PERF_SRD_12370_INT, PERF_SRD_12404, PERF_SRD_10166_INT)


-- INPUTS
Perf_Dpkg.takeoff_gwt.valid                      := True
Perf_Background_Dpkg.Pcactorsec                  := Temporary
Perf_Dpkg.takeoff_gwt.data                       := 400.0
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec    := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec                                   := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
4005  4016 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
4006  4017 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
4007  4018 Perf_Dpkg.Min_Gwt := 100.0
4008  4019 Perf_Dpkg.Max_Gwt := 400.0
4009  4020 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
4010  4021 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase := Descent --Perf_Background_Dpkg.Pcfltphase
4011  4022 Perf_Background_Dpkg.Psignorehm := True
4012  4023 Perf_Background_Dpkg.Ats_Enable := True
4013  4024 Perf_Background_Dpkg.Psautolat := False
4014  4025 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
4015  4026 Perf_Background_Dpkg.Psengout := True
4016  4027 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
4017  4028 Perf_Background_DPkg.Pscurcas := 5.0
4018  4029 Perf_Background_DPkg.Pscurmach := 5.0
4019  4030 Perf_Background_DPkg.Pscurtas := 5.0
4020  4031 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
4021  4032 Perf_Background_Dpkg.Pstogwtval := False
4022  4033 Perf_Background_Dpkg.Pstogwt := 50.0
4023  4034 Perf_Background_Dpkg.Pcgwind := Invalid
4024  4035 Perf_Background_Dpkg.Psgw := 0.0
4025  4036 Perf_Dpkg.Gross_Weight.Status := Valid
4026  4037 Perf_Dpkg.Gross_Weight.Data := 150.0
4027  4038 Perf_Integration_DPkg.Pcairbrakes := Fullab
4028  4039 Perf_Background_Dpkg.Pcacconfig := 5
4029  4040 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
4030  4041 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
4031  4042 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
4032  4043 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
4033  4044 Perf_Background_Dpkg.Psstpclbact := True
4034  4045 Perf_Background_Dpkg.Psstpdesact := True
4035  4046 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
4036  4047 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
4037  4048 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
4038  4049 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
4039  4050 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
4040  4051 Perf_Background_Dpkg.Pcprebcalt.Valid := True
4041  4052 Perf_Background_Dpkg.Pcgmttime.Hour := 1
4042  4053 Perf_Background_Dpkg.Pcgmttime.Minute := 1
4043  4054 Perf_Background_Dpkg.Pcgmttime.Second := 1
4044  4055 Perf_Background_Dpkg.Psinertvs := 5.0
4045  4056 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
4046  4057 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
4047  4058 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
4048  4059 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
```

```
4049  4060 Perf_Ads_Dpkg.Pr_Enabled := False
4050  4061 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
4051  4062 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
4052  4063 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Inactive
4053  4064 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
4054  4065 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
4055  4066 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
4056  4067 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
4057  4068 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
4058  4069 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 20000
4059  4070 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat:=79.0
4060  4071 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas := 100.0
4061  4072 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach := 0.5
4062  4073 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas := 50.0
4063  4074
4064  4075 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive  := False
4065  4076 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel   := True
4066  4077 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn := False
4067  4078 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel := True
4068  4079 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv := False
4069  4080 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval := False
4070  4081 Guid_Checkpoint_Resynch_Dpkg.Va3holdflags.Consider_Hm := False
4071  4082 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim    := False
4072  4083 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim   := False
4073  4084 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel  := False
4074  4085 Perf_Dpkg.Pshmdeleted := True
4075  4086
4076  4087 -- initlize the output values
4077  4088 Perf_Background_Dpkg.Pcholdflags.Hmactive           := True
4078  4089 Perf_Background_Dpkg.Pcholdflags.Hmdecel            := False
4079  4090 Perf_Background_Dpkg.Pcholdflags.Manhmwarn          := True
4080  4091 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel          := False
4081  4092 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv          := True
4082  4093 Perf_Background_Dpkg.Pcholdflags.Hmdistval          := True
4083  4094 Perf_Background_Dpkg.Pcholdflags.Consider_Hm        := True
4084  4095 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim            := True
4085  4096 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim           := True
4086  4097 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel          := True
4087  4098 Perf_Dpkg.Repredict_Hm_Decel                        := True
4088  4099 Perf_Background_Dpkg.Psappspdlat                    := True
4089  4100 Perf_Background_Dpkg.Noise_Data.Altitude.Valid      := True
4090  4101 Perf_Background_Dpkg.Noise_Data.Speed.Valid         := True
4091  4102 Perf_Background_Dpkg.Pshmdecel                      := True
4092  4103 Perf_Background_Dpkg.Psconsider_Hm                  := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
4093  4104 Perf_Background_Dpkg.Pshxpxdecel                    := False
4094  4105
4095       ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
      4106 #sba prf_bkgnd_pkg.get_bk_Data #1473
4096  4107 #go
4097  4108 Noise_Abate_Data.NOISE_SPEED = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).NOISE_SPEED
4098  4109 Noise_Abate_Data.Noise_Speed_Val = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val
4099  4110 Noise_Abate_Data.Noise_End_Alt = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
4100  4111 Noise_Abate_Data.Default_Noise_Spd = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Default_Noise_S
           » pd
4101  4112 Noise_Abate_Data.Default_Noise_Spd_Val = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Default_Noi
           » se_Spd_Val
4102  4113 Noise_Abate_Data.Noise_Thrust = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Thrust
4103  4114 !run_test()
4104  4115
4105  4116 -- OUTPUTS
4106  4117
4107  4118 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai       = True
4108  4119 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai         = True
4109  4120 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond        = True
4110  4121 Perf_Background_Dpkg.Pcholdflags.Hmactive      = False
4111  4122 Perf_Background_Dpkg.Pcholdflags.Hmdecel       = True
4112  4123 Perf_Background_Dpkg.Pcholdflags.Manhmwarn     = False
4113  4124 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel     = True
4114  4125 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv     = False
4115  4126 Perf_Background_Dpkg.Pcholdflags.Hmdistval     = False
4116  4127 Perf_Background_Dpkg.Pcholdflags.Consider_Hm   = False
4117  4128 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim       = False
4118  4129 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim      = False
4119  4130 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel     = False
4120  4131 Perf_Dpkg.Repredict_Hm_Decel                   /= false  -- Same as initialized
4121  4132 Perf_Dpkg.Pshmdeleted                          /= false -- Same as initialized
4122  4133 Perf_Background_Dpkg.Pshmdecel                 = False
4123  4134 Perf_Background_Dpkg.Psappspdlat               = False
4124  4135 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
4125  4136 Perf_Background_Dpkg.Noise_Data.Speed.Valid    = False
4126  4137 Perf_Background_Dpkg.Psconsider_Hm             = False
4127  4138 Perf_Background_Dpkg.Pshxpxdecel               = True
4128  4139 -----------------------------------------------------------------------------------------------------------------------
           » ---
4129  4140 TESTID: 18
4130  4141
4131  4142     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
4132  4143     working flight plan.
```

```
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    The noise data:  altitude, speed and thrust shall be copied from FPLN inputs for the all working flight plans,
    by calling Fpln_Ext_Dpkg.Get_Noise_Data except when the working flight plan is a Temporary.  When the working
    flight plan is a Temporary flight plan, the noise data is copied from the Active flight plan.
    Anchor PERF_SDD_4327 (PERF_SRD_10166_INT, PERF_SRD_12370_INT, PERF_SRD_12404)


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Ats_Enable := True
Perf_Background_Dpkg.Psautolat := False
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
Perf_Background_Dpkg.Psengout := True
Cdk_Vert_Dpkg:Body.Engine_Out_I := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.hmdecel := True
Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
Perf_Dpkg.Repredict_Hm_Decel := False
Perf_Background_DPkg.Pscurcas := 5.0
Perf_Background_DPkg.Pscurmach := 5.0
Perf_Background_DPkg.Pscurtas := 5.0
Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
Perf_Background_Dpkg.Pstogwtval := False
Perf_Background_Dpkg.Pstogwt := 50.0
Perf_Background_Dpkg.Pcgwind := Invalid
Perf_Background_Dpkg.Psgw := 0.0
Perf_Dpkg.Gross_Weight.Status := Valid
Perf_Dpkg.Gross_Weight.Data := 150.0
Perf_Integration_DPkg.Pcairbrakes := Fullab
Perf_Background_Dpkg.Pcacconfig := 5
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
4177  4188 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
4178  4189 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
4179  4190 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
4180  4191 Perf_Background_Dpkg.Psstpclbact := True
4181  4192 Perf_Background_Dpkg.Psstpdesact := True
4182  4193 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
4183  4194 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
4184  4195 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
4185  4196 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
4186  4197 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
4187  4198 Perf_Background_Dpkg.Pcprebcalt.Valid := True
4188  4199 Perf_Background_Dpkg.Pcgmttime.Hour := 1
4189  4200 Perf_Background_Dpkg.Pcgmttime.Minute := 1
4190  4201 Perf_Background_Dpkg.Pcgmttime.Second := 1
4191  4202 Perf_Background_Dpkg.Psinertvs := 5.0
4192  4203 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
4193  4204 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
4194  4205 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
4195  4206 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
4196  4207 Perf_Ads_Dpkg.Pr_Enabled := False
4197  4208 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
4198  4209 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
4199  4210 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Inactive
4200  4211 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
4201  4212 # go
4202  4213 Perf_Dpkg.takeoff_gwt.valid := True
4203  4214 Perf_Background_Dpkg.Pcactorsec := Secondary
4204  4215 Perf_Dpkg.takeoff_gwt.data := 400.0
4205  4216 #DELB/ALL
4206       ~~#sba prf_bkgnd_pkg.get_bk_Data #1466~~
      4217 #sba prf_bkgnd_pkg.get_bk_Data #1473
4207  4218 #go
4208  4219 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = False
4209  4220 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
4210  4221 Noise_Abate_Data.NOISE_SPEED = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).NOISE_SPEED
4211  4222 Noise_Abate_Data.Noise_Speed_Val = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_Speed_Va
           » l
4212  4223 Noise_Abate_Data.Noise_End_Alt = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt
4213  4224 Noise_Abate_Data.Default_Noise_Spd = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Default_Nois
           » e_Spd
4214  4225 Noise_Abate_Data.Default_Noise_Spd_Val = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Default_
           » Noise_Spd_Val
4215  4226 Noise_Abate_Data.Noise_Thrust = FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_Thrust
4216  4227 !run_test()
```

```

-- OUTPUTS
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai = True
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond = True
----------------------------------------------------------------------------------------------------------------------
» ---

TESTID: 19

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true
   the Noise_Thrust_Target from VGUIDE is valid.
   so, predicted noise thrust ramping data is initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to
   the Noise_Thrust_Target, and Perf_Background_Dpkg.Noise_Data.Ramping to true.

*If  1. the Flex_Takeoff_Temperature validity is true,
   *2. the aircraft is in Climb or below, ("Climb" in this testcase)
   *3. the aircraft altitude is at or below thrust reduction altitude ("below" in this testcase) and
    4. there is not an engine out condition
  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
» .
        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
       *Else
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
4259 4270            Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
4260 4271   Otherwise the Flex_Isadev value will be set to zero.
4261 4272 PERF_SDD_5585(PERF_SRD_12437)
4262 4273
4263 4274
4264 4275 --INPUTS
4265 4276
4266 4277 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Climb
4267 4278 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
4268 4279 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
4269 4280 Perf_Background_Dpkg.Psorgalt := 36090.0
4270 4281 Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target  := (10.6, True)
4271 4282 --Guid_Ext_Dpkg.Noise_Thrust_Target := (Data =>10.6, Valid=>True)
4272 4283 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start := True
4273 4284 --Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid                   := True
4274 4285
4275 4286 -- Reset Output
4276 4287 Perf_Background_Dpkg.Flex_Isadev.Data   := 5.0
4277 4288 Perf_Background_Dpkg.Noise_Data.Tspd    := (0.0, False)
4278 4289 Perf_Background_Dpkg.Noise_Data.Ramping := False
4279 4290
4280 4291 #sba Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt before_end
4281 4292 #go
4282 4293 Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude := 156
4283 4294
4284 4295 #sba Perf_Get_State_Pkg.Get_State before_end
4285 4296 #go
4286 4297 Curacalt := 155.0
4287 4298
4288      ~~#sba CDK_VERT_DPKG #786~~
     4299 #sba CDK_VERT_DPKG #789
4289 4300 #go
4290 4301 Engine_Out_I := False
4291 4302
4292 4303 !run_test()
4293 4304
4294 4305 -- OUTPUTS
4295 4306 Perf_Background_Dpkg.Flex_Isadev.Data      = 77.501508
4296 4307 Perf_Background_Dpkg.Noise_Data.Tspd.Data  = 10.6
4297 4308 Perf_Background_Dpkg.Noise_Data.Tspd.Valid = True
4298 4309 Perf_Background_Dpkg.Noise_Data.Ramping    = True
4299 4310
4300 4311 -----------------------------------------------------------------------------------------------------------------------
          » --
```

```
TESTID: 20

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is not true
   Navigation(Nav Filtered) A/C Altitude is Valid
   Noise End altitude is valid
   the Noise_Thrust_Target from VGUIDE is valid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
   so, predicted noise thrust ramping data is initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to
   the Noise_Thrust_Target, and Perf_Background_Dpkg.Noise_Data.Ramping to true.

If *1. the Flex_Takeoff_Temperature validity is true,
    2. the aircraft is in Climb or below,
    3. the aircraft altitude is at or below thrust reduction altitude and
    4. there is not an engine out condition
  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
» .
        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
        Else
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
 *Otherwise the Flex_Isadev value will be set to zero.
PERF_SDD_5585(PERF_SRD_12437)

```

```

--INPUTS

Perf_Background_Dpkg.Pcactorsec := Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := False
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target := (10.6, True)
--Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start := False
--Guid_Ext_Dpkg.Noise_Thrust_Target.Valid                   := True
Navigation_Data.Aircraft_Altitude_Valid := True
Navigation_Data.Aircraft_Altitude := 53.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status := Takeoff_Alt_Types.Active
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val := False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt :=  90.0
Perf_Background_Dpkg.Psengout := False
-- Reset Output
Perf_Background_Dpkg.Flex_Isadev.Data   := 5.0
Perf_Background_Dpkg.Noise_Data.Tspd    := (0.0, False)
Perf_Background_Dpkg.Noise_Data.Ramping := False

#sba Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt before_end
#go
Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude := 156

#sba Perf_Get_State_Pkg.Get_State before_end
#go
Curacalt := 155.0
--#return
!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Flex_Isadev.Data = 0.0
Perf_Background_Dpkg.Noise_Data.Tspd.Data  = 10.6
Perf_Background_Dpkg.Noise_Data.Tspd.Valid = True
Perf_Background_Dpkg.Noise_Data.Ramping = True

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 21

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ftaltitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is  true
   Navigation(Nav Filtered) A/C Altitude is Valid
   Noise End altitude is valid
   the Noise_Thrust_Target from VGUIDE is invalid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.

If  1. the Flex_Takeoff_Temperature validity is true,
   *2. the aircraft is in Climb or below,
    3. the aircraft altitude is at or below thrust reduction altitude and
    4. there is not an engine out condition
  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
» .
        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
        Else
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
  *Otherwise the Flex_Isadev value will be set to zero.
PERF_SDD_5585(PERF_SRD_12437)


--INPUTS

CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target := (10.6, True)
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start := True
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid                   := False
Navigation_Data.Aircraft_Altitude_Valid := True
Navigation_Data.Aircraft_Altitude := 53.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status  := Takeoff_Alt_Types.Active
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val := False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt :=  90.0
Perf_Background_Dpkg.Psengout := False


-- Reset Output
Perf_Background_Dpkg.Flex_Isadev.Data := 5.0
Perf_Background_Dpkg.Noise_Data.Ramping := True

#sba Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt before_end
#go
Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude := 156

#sba Perf_Get_State_Pkg.Get_State before_end
#go
Curacalt := 155.0

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Flex_Isadev.Data   = 0.0
Perf_Background_Dpkg.Noise_Data.Ramping = False

----------------------------------------------------------------------------------------------------------------------
» --

TESTID: 22

If  1. the Flex_Takeoff_Temperature validity is true,
    2. the aircraft is in Climb or below,
   *3. the aircraft altitude is at or below thrust reduction altitude and
    4. there is not an engine out condition
  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
» .
        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
```

```
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
        Else
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
 *Otherwise the Flex_Isadev value will be set to zero.
PERF_SDD_5585(PERF_SRD_12437)

If Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is currently in Noi
» se Ramp
segment and no engine out condition exist then the following noise data shall be set up for background's usage:
PERF_SDD_5607_INT

The validity of Perf_Background_Dpkg.Noise_Data.Altitude shall be set to valid and its value is set to Noise_End_Alt o
» btained
from FPLN.
PERF_SDD_5608_INT

If Noise Speed (Noise_Speed_Val) from FPLN is valid then the validity of Perf_Background_Dpkg.Noise_Data.Speed shall b
» e set to
valid and its value is set to Noise_Speed obtained from FPLN, otherwise its validity is set to invalid.
PERF_SDD_5610_INT (Here Noise Speed (Noise_Speed_Val) from FPLN is invalid)

If Noise TSPD from FPLN  is valid than the validity of Perf_Background_Dpkg.Noise_Data.TSPD shall be set to valid and
» its
value is set to Noise_TSPD obtained from FPLN, otherwise its validity is set to Invalid.
PERF_SDD_5611_INT (Here Noise TSPD from FPLN is invalid.)

When flight phase is prior to descent phase with manual speed mode, then the speed validity shall be set as follows
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
        If CAS is selected on FCU and A/C is above crossover altitude then Valid flag for MACH speed is set to False.
This TC checks for negative conditions when CAS is selected, but A/C is not above crossover altitude.
PERF_SDD_07544_INT


--INPUTS

^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
^Noise_Speed_Val := False
^Noise_TSPD.valid := False
^Noise_End_Alt    := 300.0
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start  := True
Cdk_Vert_Dpkg:Body.Engine_Out_I := False
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
Perf_Background_Dpkg.Noise_Data.Altitude.Data := 0.0
```

```
4512   4523 Perf_Background_Dpkg.Noise_Data.Speed.Valid := True
4513   4524 Perf_Background_Dpkg.Noise_Data.Tspd.Valid := True
4514   4525
4515   4526 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Climb
4516   4527 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
4517   4528 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
4518   4529 Perf_Background_Dpkg.Psorgalt := 36090.0
4519   4530
4520   4531 -- Reset Output
4521   4532 Perf_Background_Dpkg.Flex_Isadev.Data := 5.0
4522   4533
4523   4534 #sba Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt before_end
4524   4535 #go
4525   4536 Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude := 156
4526   4537
4527   4538 #sba Perf_Get_State_Pkg.Get_State before_end
4528   4539 #go
4529   4540 Curacalt := 156.5
4530   4541
4531   4542 --#sba prf_bkgnd_pkg.get_bk_Data #1126
4532        ~~#sba prf_bkgnd_pkg.get_bk_Data #1267~~
       4543 #sba prf_bkgnd_pkg.get_bk_Data #1274
4533   4544 #go
4534   4545 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
4535   4546 Perf_Background_Dpkg.Pcmanspd.Machvalid := True
4536   4547 Perf_Background_Dpkg.Psacalt := 10000.0
4537   4548 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt := 20000.0
4538   4549 Machmode := False
4539   4550 #delb/all
4540   4551
4541        ~~#sba prf_bkgnd_pkg.get_bk_Data  #1466~~
       4552 #sba prf_bkgnd_pkg.get_bk_Data  #1473
4542   4553 #go
4543   4554 Perf_Background_Dpkg.Noise_Data.Tspd.Valid = False
4544   4555
4545   4556 !run_test()
4546   4557
4547   4558 -- OUTPUTS
4548   4559 Perf_Background_Dpkg.Flex_Isadev.Data = 0.0
4549   4560 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = True
4550   4561 Perf_Background_Dpkg.Noise_Data.Altitude.Data = 300.0
4551   4562 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
4552   4563 Perf_Background_Dpkg.Noise_Data.Tspd.Valid = False
4553   4564 Perf_Background_Dpkg.Pcmanspd.Machvalid = True
```

```
----------------------------------------------------------------------------------------------------------------------
» --

TESTID: 23

If  1. the Flex_Takeoff_Temperature validity is true,
    2. the aircraft is in Climb or below,
   *3. the aircraft altitude is at or below thrust reduction altitude and
    4. there is not an engine out condition
  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
» .
        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
        Else
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
 *Otherwise the Flex_Isadev value will be set to zero.
PERF_SDD_5585(PERF_SRD_12437)

When flight phase is prior to descent phase with manual speed mode, then the speed validity shall be set as follows
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
        If CAS is selected on FCU and A/C is above crossover altitude then Valid flag for MACH speed is set to False.
This TC checks for negative conditions when MACH is selected, but A/C is not below crossover altitude.
PERF_SDD_07544_INT


--INPUTS

CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36090.0

-- Reset Output
Perf_Background_Dpkg.Flex_Isadev.Data := 5.0

#sba Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt before_end
#go
Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude := 156

#sba Perf_Get_State_Pkg.Get_State before_end
#go
Curacalt := 155.0
```

```
4596  4607 
4597       ~~#sba CDK_VERT_DPKG #786~~
      4608 #sba CDK_VERT_DPKG #789
4598  4609 #go
4599  4610 Engine_Out_I := True
4600  4611 
4601  4612 --#sba prf_bkgnd_pkg.get_bk_Data #1126
4602       ~~#sba prf_bkgnd_pkg.get_bk_Data #1267~~
      4613 #sba prf_bkgnd_pkg.get_bk_Data #1274
4603  4614 #go
4604  4615 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
4605  4616 Perf_Background_Dpkg.Pcmanspd.Casvalid := True
4606  4617 Perf_Background_Dpkg.Psacalt := 20000.0
4607  4618 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt := 10000.0
4608  4619 Machmode := True
4609  4620 
4610  4621 !run_test()
4611  4622 
4612  4623 -- OUTPUTS
4613  4624 Perf_Background_Dpkg.Flex_Isadev.Data = 0.0
4614  4625 Perf_Background_Dpkg.Pcmanspd.Casvalid = True
4615  4626 ----------------------------------------------------------------------------------------------------------------------
           » --
4616  4627 TESTID: 24
4617  4628 
4618  4629     A/C is in Cruise and current itin is Current Mode Predictions (Normal) so target speed is
4619  4630     limited by calling the speed envelope module.
4620  4631 
4621  4632     The previous non-envelope-limited target speed is set to the current VG MACH speed target
4622  4633     and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
4623  4634     if all of the following are true:
4624  4635       - A VG speed change target is not currently being applied and the flight phase is less than Approach;
4625  4636       - Current flight phase is cruise and the aircraft is at above 24950 ft
4626  4637         and the current VG CAS target is below of Climb speed limit speed.
4627  4638 
4628  4639     If the current itinerary is one of the following:
4629  4640     - Active Primary Flight Plan Predictions;
4630  4641     - Temporary Primary Flight Plan Predictions;
4631  4642     -Current mode predictions(Normal or High priority);
4632  4643     - Optimum altitude predictions;
4633  4644     then the descent path shall be retrieved from the descent path object
4634  4645     manager via a call to Perf_Ext_Despath.Pgvdespath.
4635  4646 
4636  4647     When flight phase is prior to descent phase with manual speed mode, then the speed validity shall be set as follow
```

```
» s
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
        If CAS is selected on FCU and A/C is above crossover altitude then Valid flag for MACH speed is set to False.
    CAS is selected on FCU and A/C is above crossover altitude in this TC.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3055_INT, PERF_SDD_3053_INT, PERF_SDD_3888_INT, PERF_SDD_07544_INT.
    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Navigation_Data.Aircraft_Altitude := 25000.0
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Pcactorsec := Secondary
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Flight_Plan_Type := Copy_From_Active
Perf_Background_Dpkg.Pcfltphase := Approach
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Background_Dpkg.Psacalt := 25000.0
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := True
Perf_Background_Dpkg.Psautolat := False
Guid_Ext_Dpkg.Gcxxlatautoc := True
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
Perf_Background_Dpkg.Psengout := True
Cdk_Vert_Dpkg:Body.Engine_Out_I := True
Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
Perf_Dpkg.Repredict_Hm_Decel := True
Perf_Background_DPkg.Pshmdecel := True
Perf_Background_Dpkg.Pcholdflags.Hmactive := True
```

```
4680  4691 Perf_Ads_Dpkg.Fi_Enabled := True
4681  4692 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
4682  4693 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
4683  4694 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
4684  4695 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
4685  4696 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
4686  4697 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
4687  4698 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
4688  4699 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
4689  4700 Perf_Background_Dpkg.Psappspdlat := True
4690  4701 Perf_Dpkg.Pcengoutprds := Altpln
4691  4702 Perf_Background_Dpkg.Pcpathref := Onpath
4692  4703 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
4693  4704 Perf_Background_DPkg.Pscurcas := 5.0
4694  4705 Perf_Background_DPkg.Pscurmach := 5.0
4695  4706 Perf_Background_DPkg.Pscurtas := 5.0
4696  4707 Perf_Background_Dpkg.Pcitin.Itinerary := Current_Mode_Preds
4697  4708 Perf_Background_Dpkg.Psenginesoff := True
4698  4709 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
4699  4710 Perf_Background_Dpkg.Pstogwtval := False
4700  4711 Perf_Background_Dpkg.Pstogwt := 50.0
4701  4712 Perf_Background_Dpkg.Pcgwind := Invalid
4702  4713 Perf_Background_Dpkg.Psgw := 0.0
4703  4714 Perf_Dpkg.Gross_Weight.Status := Valid
4704  4715 Perf_Dpkg.Gross_Weight.Data := 150.0
4705  4716 Perf_Integration_DPkg.Pcairbrakes := Fullab
4706  4717 Perf_Background_Dpkg.Pcacconfig := 5
4707  4718 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := True
4708  4719 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 25004.0
4709  4720 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 400.0
4710  4721 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
4711  4722 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
4712  4723 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
4713  4724 Perf_Background_Dpkg.Psstpclbact := True
4714  4725 Perf_Background_Dpkg.Psstpdesact := True
4715  4726 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
4716  4727 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
4717  4728 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
4718  4729 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
4719  4730 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
4720  4731 Perf_Background_Dpkg.Pcprebcalt.Valid := True
4721  4732 Perf_Background_Dpkg.Pcgmttime.Hour := 1
4722  4733 Perf_Background_Dpkg.Pcgmttime.Minute := 1
4723  4734 Perf_Background_Dpkg.Pcgmttime.Second := 1
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
4724  4735 Perf_Background_Dpkg.Psinertvs := 5.0
4725  4736 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
4726  4737 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
4727  4738 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
4728  4739 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
4729  4740 Perf_Ads_Dpkg.Pr_Enabled := False
4730  4741 ATC_DISCRETES_PKG:body.Adson_Flag := True
4731  4742 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid := True
4732  4743 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
4733  4744 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
4734  4745 Perf_Background_Dpkg.Pcoldcasmchi := Cas
4735  4746
4736  4747 Perf_Ads_Dpkg.Ii_Enabled := False
4737  4748 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
4738  4749 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
4739  4750 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
4740  4751 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints := (0)
4741  4752 Perf_Background_Dpkg.Pcitin.Flight_Plan := Active
4742  4753
4743       ~~#sba prf_bkgnd_pkg.get_bk_Data #1267~~
      4754 #sba prf_bkgnd_pkg.get_bk_Data #1274
4744  4755 #go
4745  4756 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
4746  4757 Perf_Background_Dpkg.Pcmanspd.Machvalid := True
4747  4758 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt := 50.0
4748  4759 Machmode := False
4749  4760 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec = True
4750  4761 #delb/all
4751  4762
4752       ~~#sba prf_bkgnd_pkg.get_bk_Data #1605~~
      4763 #sba prf_bkgnd_pkg.get_bk_Data #1612
4753  4764 #go
4754  4765 Perf_Background_Dpkg.Pcfltphase := Cruise
4755  4766 Perf_Background_Dpkg.Psacalt := 25001.0
4756  4767 Perf_Integration_Dpkg.Psoldnoentgt := 1.0
4757  4768 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
4758  4769 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
4759       ~~#delba prf_bkgnd_pkg.get_bk_Data #1605~~
      4770 #delba prf_bkgnd_pkg.get_bk_Data #1612
4760  4771
4761  4772 !run_test()
4762  4773
4763  4774 -- OUTPUTS
4764  4775
```

```
Perf_Integration_Dpkg.Psoldnoentgt = 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = True
Perf_Background_Dpkg.Pcoldcasmchi = Fmcs_Base_Types.Mach
Perf_Background_Dpkg.Pcmanspd.Machvalid = False

-------------------------------------------------------------------------------------------------------------------
» --
TESTID: 25

    A/C is in Cruise and current itin is Current Mode Predictions (High priority) so target speed is
    limited by calling the speed envelope module.

    If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
   - Perf hold flag record (Pcholdflags) is copied from guidance
   - Descent limit latch record (Pcdeslimlat) is copied from guidance.
   - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
» h.
   - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
»  considers
     the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
   - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
»  HM if no
     deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
» lear the HM
     leg deleted while in decel to HM flag (Pshmdeleted).
   - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
» d, and the
     HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
» t is within
     the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
   - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
» l to HM,
     then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
    PERF_SDD_4794_INT

    The previous non-envelope-limited target speed is set to the current VG MACH speed target
    and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
    if all of the following are true:
      - A VG speed change target is not currently being applied and the flight phase is less than Approach
        (here flight phase is cruise);
      - Current flight phase is cruise and the aircraft is at above 24950 ft
        and the Climb speed limit altitude is not included or the aircraft is at or above climb speed limit altitude;

    If the current itinerary is one of the following:
```

```
    - Active Primary Flight Plan Predictions;
    - Temporary Primary Flight Plan Predictions;
    -Current mode predictions(Normal or High priority);
    - Optimum altitude predictions;
    then the descent path shall be retrieved from the descent path object
    manager via a call to Perf_Ext_Despath.Pgvdespath.

    When flight phase is prior to descent phase with manual speed mode, then the speed validity shall be set as follow
» s
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
        If CAS is selected on FCU and A/C is above crossover altitude then Valid flag for MACH speed is set to False.
    MACH is selected on FCU and A/C is below crossover altitude in this TC.

    In this case, we set the corresponding condition and verify:
    (1)Repredict_Hm_Decel is Remain false as the Initialization.  (F,F)
    (2)the HM leg deleted while in decel to HM flag is not Cleared(Pshmdeleted)  (F,T,T)
    (3)flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
» e (T,F,T)
    (4)flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to false (F, T)
    (5)Perf hold flag record (Pcholdflags) is copied from guidance
    (6)Descent limit latch record (Pcdeslimlat) is copied from guidance
    (7)Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3055_INT, PERF_SDD_3053_INT, PERF_SDD_3888_INT,
                                    PERF_SDD_07544_INT, PERF_SDD_4794_INT
    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Flight_Plan_Type := Copy_From_Active
```

```
4843  4854 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase := Cruise --Perf_Background_Dpkg.Pcfltphase
4844  4855 Perf_Background_Dpkg.Ats_Enable := True
4845  4856 Perf_Background_Dpkg.Psacalt := 25001.0
4846  4857 Perf_Database_Dpkg.Psmmo := 0.45
4847  4858 Perf_Background_Dpkg.Pszfw := 300.0
4848  4859 Perf_Background_Dpkg.Psblockfuel := 50.0
4849  4860 Perf_Background_Dpkg.Pstaxifuel := 25.0
4850  4861 Perf_Background_Dpkg.Psairborne := True
4851  4862 Perf_Background_Dpkg.Psautolat := False
4852  4863 Guid_Ext_Dpkg.Gcxxlatautoc := True
4853  4864 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
4854  4865 Perf_Background_Dpkg.Psengout := True
4855  4866 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
4856  4867 Perf_Dpkg.Repredict_Hm_Decel := False
4857  4868 Perf_Background_DPkg.Pshmdecel := True
4858  4869 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
4859  4870 Perf_Ads_Dpkg.Fi_Enabled := false
4860  4871 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
4861  4872 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
4862  4873 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
4863  4874 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
4864  4875 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
4865  4876 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
4866  4877
4867  4878 Perf_Dpkg.Pcengoutprds := Altpln
4868  4879 Perf_Background_Dpkg.Pcpathref := Onpath
4869  4880 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
4870  4881 Perf_Background_DPkg.Pscurcas := 5.0
4871  4882 Perf_Background_DPkg.Pscurmach := 5.0
4872  4883 Perf_Background_DPkg.Pscurtas := 5.0
4873  4884 Perf_Background_Dpkg.Pcitin.Itinerary := Current_Mode_Hi_Pri
4874  4885 Perf_Background_Dpkg.Psenginesoff := True
4875  4886 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
4876  4887 Perf_Background_Dpkg.Pstogwtval := False
4877  4888 Perf_Background_Dpkg.Pstogwt := 50.0
4878  4889 Perf_Background_Dpkg.Pcgwind := Invalid
4879  4890 Perf_Background_Dpkg.Psgw := 0.0
4880  4891 Perf_Dpkg.Gross_Weight.Status := Valid
4881  4892 Perf_Dpkg.Gross_Weight.Data := 150.0
4882  4893 Perf_Integration_DPkg.Pcairbrakes := Fullab
4883  4894 Perf_Background_Dpkg.Pcacconfig := 5
4884  4895 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
4885  4896 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
4886  4897 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 300.0
```

```
4887   4898 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
4888   4899 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
4889   4900 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
4890   4901 Perf_Background_Dpkg.Psstpclbact := True
4891   4902 Perf_Background_Dpkg.Psstpdesact := True
4892   4903 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
4893   4904 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
4894   4905 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
4895   4906 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
4896   4907 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
4897   4908 Perf_Background_Dpkg.Pcprebcalt.Valid := True
4898   4909 Perf_Background_Dpkg.Pcgmttime.Hour := 1
4899   4910 Perf_Background_Dpkg.Pcgmttime.Minute := 1
4900   4911 Perf_Background_Dpkg.Pcgmttime.Second := 1
4901   4912 Perf_Background_Dpkg.Psinertvs := 5.0
4902   4913 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
4903   4914 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
4904   4915 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
4905   4916 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
4906   4917 Perf_Ads_Dpkg.Pr_Enabled := False
4907   4918 ATC_DISCRETES_PKG:body.Adson_Flag := True
4908   4919 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid := True
4909   4920 Perf_Ads_Dpkg.Ii_Enabled := False
4910   4921 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
4911   4922 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
4912   4923 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
4913   4924 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints := (0)
4914   4925 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := false
4915   4926 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
4916   4927 Perf_Background_Dpkg.Pcitin.Flight_Plan := Active
4917   4928 Navigation_Data.Aircraft_Altitude := 25001.0
4918   4929 Perf_Background_Dpkg.Pcoldcasmchi := Cas
4919   4930 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive  := False
4920   4931 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel   := False
4921   4932 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn := True
4922   4933 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel := False
4923   4934 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv := False
4924   4935 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval := False
4925   4936 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm := True
4926   4937 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim    := True
4927   4938 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim   := True
4928   4939 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel  := True
4929   4940 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt := 0.0
4930   4941 Perf_Dpkg.Pshmdeleted := True
```

```
CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt   :=25001.0
Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt := 25001.1
CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected :=
» True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 20000
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat:=79.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas := -100.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach := 0.5
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas := 50.0

-- Reset Outputs
Perf_Background_Dpkg.Pcholdflags.Hmactive           := True
Perf_Background_Dpkg.Pcholdflags.Hmdecel            := True
Perf_Background_Dpkg.Pcholdflags.Manhmwarn          := False
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel          := True
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv          := True
Perf_Background_Dpkg.Pcholdflags.Hmdistval          := True
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim            := False
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim           := False
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel          := False
Perf_Background_Dpkg.Pcholdflags.Consider_Hm        := False
Perf_Background_Dpkg.Psappspdlat                    := true
Perf_Background_Dpkg.Psconsider_Hm                  := True
Perf_Background_Dpkg.Pshmdecel                      := true
Perf_Integration_Dpkg.Psoldnoentgt := 1.0
Perf_Background_Dpkg.Pcmanspd.Casvalid := True

!run_test()

-- OUTPUTS

Perf_Integration_Dpkg.Psoldnoentgt = 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = True
Perf_Background_Dpkg.Pcoldcasmchi = Fmcs_Base_Types.Mach
Perf_Background_Dpkg.Pcholdflags.Hmactive    = False
Perf_Background_Dpkg.Pcholdflags.Hmdecel     = False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn   = True
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel   = False
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv   = False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
Perf_Background_Dpkg.Pcholdflags.Hmdistval   = False
Perf_Background_Dpkg.Pcholdflags.Consider_Hm = True
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim     = True
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim    = True
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel   = True
Perf_Dpkg.Pshmdeleted                        /= false --Remain true as the Initialization.
Perf_Background_Dpkg.Pshmdecel               = False
Perf_Background_Dpkg.Pcmanspd.Casvalid       = False
Perf_Background_Dpkg.Psappspdlat             = false
Perf_Background_Dpkg.Psconsider_Hm           = False
Perf_Dpkg.Repredict_Hm_Decel                 = False --Remain false as the Initialization.
CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec = True
----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 26

    The previous non-envelope-limited target speed is set to the current VG MACH speed target
    and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
    if all of the following are true:
      - A VG speed change target is not currently being applied and The flight phase is less than Approach
        (here flight phase is Takeoff);
      - A CMS is currently active and the aircraft is above climb speed limit altitude;

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3053_INT
    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Flight_Plan_Type := Copy_From_Active
Perf_Background_Dpkg.Pcfltphase := Approach
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
 5017   5028 Perf_Background_Dpkg.Ats_Enable := True
 5018   5029 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
 5019   5030 Perf_Background_Dpkg.Psacalt := 25001.0
 5020   5031 Perf_Database_Dpkg.Psmmo := 0.45
 5021   5032 Perf_Background_Dpkg.Pszfw := 300.0
 5022   5033 Perf_Background_Dpkg.Psblockfuel := 50.0
 5023   5034 Perf_Background_Dpkg.Pstaxifuel := 25.0
 5024   5035 Perf_Background_Dpkg.Psairborne := True
 5025   5036 Perf_Background_Dpkg.Psautolat := False
 5026   5037 Guid_Ext_Dpkg.Gcxxlatautoc := True
 5027   5038 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := True
 5028   5039 Perf_Background_Dpkg.Psengout := True
 5029   5040 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
 5030   5041 Perf_Dpkg.Repredict_Hm_Decel := True
 5031   5042 Perf_Background_DPkg.Pshmdecel := True
 5032   5043 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
 5033   5044 Perf_Ads_Dpkg.Fi_Enabled := True
 5034   5045 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
 5035   5046 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
 5036   5047 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
 5037   5048 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
 5038   5049 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
 5039   5050 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
 5040   5051 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
 5041   5052 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
 5042   5053 Perf_Background_Dpkg.Psappspdlat := True
 5043   5054 Perf_Dpkg.Pcengoutprds := Altpln
 5044   5055 Perf_Background_Dpkg.Pcpathref := Onpath
 5045   5056 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
 5046   5057 Perf_Background_DPkg.Pscurcas := 5.0
 5047   5058 Perf_Background_DPkg.Pscurmach := 5.0
 5048   5059 Perf_Background_DPkg.Pscurtas := 5.0
 5049   5060 Perf_Background_Dpkg.Pcitin.Itinerary := Current_Mode_Hi_Pri
 5050   5061 Perf_Background_Dpkg.Psenginesoff := True
 5051   5062 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
 5052   5063 Perf_Background_Dpkg.Pstogwtval := False
 5053   5064 Perf_Background_Dpkg.Pstogwt := 50.0
 5054   5065 Perf_Background_Dpkg.Pcgwind := Invalid
 5055   5066 Perf_Background_Dpkg.Psgw := 0.0
 5056   5067 Perf_Dpkg.Gross_Weight.Status := Valid
 5057   5068 Perf_Dpkg.Gross_Weight.Data := 150.0
 5058   5069 Perf_Integration_DPkg.Pcairbrakes := Fullab
 5059   5070 Perf_Background_Dpkg.Pcacconfig := 5
 5060   5071 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := True
```

```
5061  5072 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
5062  5073 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 400.0
5063  5074 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
5064  5075 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
5065  5076 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
5066  5077 Perf_Background_Dpkg.Psstpclbact := True
5067  5078 Perf_Background_Dpkg.Psstpdesact := True
5068  5079 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
5069  5080 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
5070  5081 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
5071  5082 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
5072  5083 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
5073  5084 Perf_Background_Dpkg.Pcprebcalt.Valid := True
5074  5085 Perf_Background_Dpkg.Pcgmttime.Hour := 1
5075  5086 Perf_Background_Dpkg.Pcgmttime.Minute := 1
5076  5087 Perf_Background_Dpkg.Pcgmttime.Second := 1
5077  5088 Perf_Background_Dpkg.Psinertvs := 5.0
5078  5089 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
5079  5090 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
5080  5091 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
5081  5092 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
5082  5093 Perf_Ads_Dpkg.Pr_Enabled := False
5083  5094 ATC_DISCRETES_PKG:body.Adson_Flag := True
5084  5095 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid := True
5085  5096 Guid_Checkpoint_Resynch_Dpkg.Va3holdflags.Hmdecel := False
5086  5097 Perf_Dpkg.Pshmdeleted := True
5087  5098 Perf_Ads_Dpkg.Ii_Enabled := False
5088  5099 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
5089  5100 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
5090  5101 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
5091  5102 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints := (0)
5092  5103 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := True
5093  5104 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
5094  5105 Perf_Background_Dpkg.Pcitin.Flight_Plan := Active
5095  5106 Navigation_Data.Aircraft_Altitude := 25001.0
5096  5107 Perf_Background_Dpkg.Pcoldcasmchi := Cas
5097  5108
5098       ~~#sba prf_bkgnd_pkg.get_bk_Data #1605~~
      5109 #sba prf_bkgnd_pkg.get_bk_Data #1612
5099  5110 #go
5100  5111 Perf_Background_Dpkg.Psacalt := 25001.0
5101  5112 Perf_Integration_Dpkg.Psoldnoentgt := 1.0
5102  5113 Perf_Background_Dpkg.Pcfltphase := Takeoff
5103       ~~#delba prf_bkgnd_pkg.get_bk_Data #1605~~
```

```
      5114 #delba prf_bkgnd_pkg.get_bk_Data #1612
5104  5115
5105  5116 !run_test()
5106  5117
5107  5118 -- OUTPUTS
5108  5119 Perf_Integration_Dpkg.Psoldnoentgt = 0.0
5109  5120 Perf_Background_Dpkg.Pcoldcasmchi = Fmcs_Base_Types.Mach
5110  5121
5111  5122 ------------------------------------------------------------------------------------------------------------------------
           » --
5112  5123 TESTID: 27
5113  5124
5114  5125     The previous non-envelope-limited target speed is set to the current VG MACH speed target
5115  5126     and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
5116  5127     if all of the following are true:
5117  5128       - A VG speed change target is not currently being applied and the flight phase is less than Approach
5118  5129         (here flight phase is takeoff);
5119  5130       - Current flight phase is not cruise or the climb/descent step is active and the aircraft is above crossover alt
           » itude;
5120  5131
5121  5132     If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
5122  5133    - Perf hold flag record (Pcholdflags) is copied from guidance
5123  5134    - Descent limit latch record (Pcdeslimlat) is copied from guidance.
5124  5135    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
           » h.
5125  5136    - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
           »  considers
5126  5137      the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
5127  5138    - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
           »  HM if no
5128  5139      deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
           » lear the HM
5129  5140      leg deleted while in decel to HM flag (Pshmdeleted).
5130  5141    - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
           » d, and the
5131  5142      HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
           » t is within
5132  5143      the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
5133  5144    - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
           » l to HM,
5134  5145      then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
5135  5146     PERF_SDD_4794_INT
5136  5147
5137  5148     This test case verify:(the working flight plan is Temporary)
```

```
    (1)Perf hold flag record (Pcholdflags) is copied from guidance
    (2)Descent limit latch record (Pcdeslimlat) is copied from guidance
    (3)Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false
    (4)the re-evaluation indication flag is cleared (Repredict_Hm_Decel) (F,T)
    (5)HM leg deleted is cleared while in decel to HM flag (Pshmdeleted)  (F,F,T)
    (6)Flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to false (F,F)
    (7)flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
» e (F,F,F)

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3053_INT, PERF_SDD_4794_INT
    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoldcasmchi := Cas
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
Perf_Background_Dpkg.Flight_Plan_Type := Copy_From_Active
Perf_Background_Dpkg.Pcactorsec                            := Temporary
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive  := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel   := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim    := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim   := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel  := False
Perf_Dpkg.Pshmdeleted := True
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase  := Descent
Perf_Background_Dpkg.Constant_Mach_Seg.Is_Active := False
CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt   :=25001.0
CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 20000
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat:=79.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas := 100.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach := -0.5
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas := 50.0
Guid_Spds_Dpkg.Vc3curspds.Fltphase := Descent

```

```
-- Reset Outputs
Perf_Background_Dpkg.Pcholdflags.Hmactive           := True
Perf_Background_Dpkg.Pcholdflags.Hmdecel            := True
Perf_Background_Dpkg.Pcholdflags.Manhmwarn          := True
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel          := False
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv          := False
Perf_Background_Dpkg.Pcholdflags.Hmdistval          := False
Perf_Background_Dpkg.Pcholdflags.Consider_Hm        := True

Perf_Integration_Dpkg.Pcdeslimlat.Spdlim            := True
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim           := True
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel          := True
Perf_Dpkg.Pshmdeleted                               := True
Perf_Dpkg.Repredict_Hm_Decel                        := True
Perf_Background_Dpkg.Psappspdlat                    := True
Perf_Background_DPkg.Pshmdecel                      := True
Perf_Background_Dpkg.Psconsider_Hm                  := True
Perf_Background_Dpkg.Psappspdlat                    := True
Perf_Integration_Dpkg.Psoldnoentgt := 1.0

!run_test()

-- OUTPUTS
Perf_Integration_Dpkg.Psoldnoentgt = -0.5
Perf_Background_Dpkg.Pcoldcasmchi = Fmcs_Base_Types.Mach
Perf_Background_Dpkg.Pcholdflags.Hmactive    = False
Perf_Background_Dpkg.Pcholdflags.Hmdecel     = False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn   = False
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel   = True
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv   = True
Perf_Background_Dpkg.Pcholdflags.Hmdistval   = True
Perf_Background_Dpkg.Pcholdflags.Consider_Hm = False
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim     = False
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim    = False
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel   = False
Perf_Dpkg.Repredict_Hm_Decel                 = False
Perf_Background_Dpkg.Pshmdecel               = False
Perf_Dpkg.Pshmdeleted                        = False
Perf_Background_Dpkg.Psconsider_Hm           = False
Perf_Background_Dpkg.Psappspdlat             = False

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 28
```

```
5224  5235
5225  5236     The previous non-envelope-limited target speed is set to the current VG MACH speed target
5226  5237     and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
5227  5238     if all of the following are true:
5228  5239       - A VG speed change target is not currently being applied and the flight phase is less than Approach
5229  5240         (here flight phase is Cruise);
5230  5241       - Current flight phase is not cruise or the climb/descent step is active and the aircraft is above crossover alt
             » itude;
5231  5242
5232  5243     REQUIREMENTS UNDER EVALUATION : PERF_SDD_3053_INT.
5233  5244     SUPPORTING REQUIREMENTS : N/A
5234  5245
5235  5246
5236  5247 -- INPUTS
5237  5248
5238  5249 Perf_Background_DPkg.Pshmdecel := False
5239  5250 Perf_Background_Dpkg.Pcoldcasmchi := Cas
5240  5251 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
5241  5252 Perf_Background_Dpkg.Pcfltphase := Cruise
5242  5253
5243       ~~#sba prf_bkgnd_pkg.get_bk_Data #1605~~
      5254 #sba prf_bkgnd_pkg.get_bk_Data #1612
5244  5255 #go
5245  5256 Perf_Background_Dpkg.Psacalt := 25001.0
5246  5257 Perf_Background_Dpkg.Constant_Mach_Seg.Is_Active := False
5247  5258 Perf_Integration_Dpkg.Psoldnoentgt := 1.0
5248  5259 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := True
5249  5260 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
5250       ~~#delba prf_bkgnd_pkg.get_bk_Data #1605~~
      5261 #delba prf_bkgnd_pkg.get_bk_Data #1612
5251  5262
5252  5263 !run_test()
5253  5264
5254  5265 -- OUTPUTS
5255  5266 Perf_Integration_Dpkg.Psoldnoentgt = 0.0
5256  5267 Perf_Background_Dpkg.Pcoldcasmchi = Fmcs_Base_Types.Mach
5257  5268
5258  5269 -----------------------------------------------------------------------------------------------------------------------
             » --
5259  5270 TESTID: 29
5260  5271
5261  5272     When the flight phase is approach, the descent path reference shall be set to
5262  5273     the guidance descent path reference(Va3pathref).
5263  5274     PERF_SDD_07500_INT
```

```
5264  5275
5265  5276      If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
            » s are on,
5266  5277      the aircraft gross weight shall be set to any one of the following:
5267  5278     - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
            » craft
5268  5279       gross weight and Take Off gross weight being valid
5269  5280     - Aircraft GW from the Performance Weights function,  if the flight phase is other
5270  5281       than takeoff or before, or the aircraft gross weight or the Take Off gross weight
5271  5282       being invalid
5272  5283      The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
5273  5284      PERF_SDD_07501_INT
5274  5285      --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is active,the flight
            »  phase is
5275  5286      --Approach,then Aircraft GW from the Performance Weights function.
5276  5287
5277  5288      If the mach target and the fcu mach selected mode retrieved from IO via Io_Fg_Fm_Internal_Dpkg.Mach_Target are val
            » id,
5278  5289      then the speed target tag shall be set to indicate Mach and the speed target is set the value of mach target.
5279  5290      PERF_SDD_07502_INT
5280  5291      If the CAS target from IO is valid and the fcu mach selected mode retrieved from IO is invalid,
5281  5292      then the speed target tag shall be set to indicate CAS and the speed target is set the value of CAS target.
5282  5293      PERF_SDD_07503_INT
5283  5294      --In this tese case, the mach target and the CAS target are valid, the fcu mach selected mode is valid
5284  5295
5285  5296      When the FPA mode active and the target retrieved from IO are valid,
5286  5297      then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
5287  5298      The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
            »  retrieved
5288  5299      from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
            » rom ft/min
5289  5300      to ft/sec. The flag indicating the vertical speed mode active is set to True.
5290  5301      PERF_SDD_07504_INT
5291  5302       --In this tese case, the FPA mode active and the target retrieved from IO are valid
5292  5303      The destination QNH data shall be initialized to standard QNH if it is invalid with the destination being defined
5293  5304      PERF_SDD_07505_INT
5294  5305      --In this test case, The destination QNH data is invalid and the destination being defined
5295  5306      If the current itinerary is neither Current Mode Predictions (Normal or High priority)
5296  5307      nor Pred_to_alt itinerary, then the vertical mode(Pcvertmode) shall be set to Econ mode.
5297  5308      PERF_SDD_07506(PERF_SRD_6192)
5298  5309      --In this teste case, the current itinerary is No_Itinerary, Pcvertmode shall be set to Econ mode
5299  5310      ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is th
            » e first pass
5300  5311      of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
```

```
    PERF_SDD_08225_INT
    --In this test case, all the condition are true and FLIGHT PHASE is approach
    During descent or approach with current target speeds from FG are valid, ECON CAS limited by speed constraint othe
» r than
    speed limit shall be set to current CAS speed if partially limited managed speed target is zero else it is set to
    partially limited managed speed target.
    PERF_SDD_07540
    --In this test case, During approach the partially limited managed speed target is not zero
    During descent or approach with current target speeds from FG are valid, if speed limit or ICAO limit is latched i
» n descent
    then ECON/LRC (based on the selected flight criterion), CAS limited flag shall be set to true.
    PERF_SDD_08227_INT
   --In this test case, During approach speed limit is true but ICAO limit is false
    If current target speeds from FG are valid, then the speed change target restriction record from VG is copied to P
» erf and
    the speed change apply flag shall be set if the aircraft is in the deceleration zone to HM.
    PERF_SDD_07542_INT
    --In this tese case, current target speeds from FG are valid and the aircraft is not in the deceleration zone
    If current target speeds from FG are valid, then the speed change Ident from VG speed change target restriction re
» cord shall
    be saved to the global Speed Change Ident.
    PERF_SDD_08171_INT

    Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
    are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
» d to FL250.
    PERF_SDD_07543_INT
    --In this test case, VG speed targets are all valid and greater than lower limits
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07500_INT, PERF_SDD_07501_INT, PERF_SDD_07502_INT, PERF_SDD_07503_INT,
                                    PERF_SDD_07504_INT, PERF_SDD_07505_INT, PERF_SDD_07506(PERF_SRD_6192), PERF_SDD_08
» 225_INT,
                                    PERF_SDD_07540, PERF_SDD_08227_INT, PERF_SDD_07542_INT, PERF_SDD_07543_INT,
                                    PERF_SDD_08171_INT
    SUPPORTING REQUIREMENTS : N/A


--INPUTS
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
5339  5350 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
5340  5351 Perf_Background_Dpkg.Ats_Enable := True
5341  5352 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Approach
5342  5353 Perf_Database_Dpkg.Psmmo := 0.45
5343  5354 Perf_Background_Dpkg.Pszfw := 300.0
5344  5355 Perf_Background_Dpkg.Psblockfuel := 50.0
5345  5356 Perf_Background_Dpkg.Pstaxifuel := 25.0
5346  5357 Perf_Background_Dpkg.Psairborne := False
5347  5358 Perf_Background_Dpkg.Psautolat := True
5348  5359
5349  5360 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
5350  5361 Perf_Background_Dpkg.Psengout := True
5351  5362 Cdk_Vert_Dpkg:Body.Engine_Out_I := False
5352  5363 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
5353  5364 Perf_Dpkg.Repredict_Hm_Decel := True
5354  5365 Perf_Background_DPkg.Pshmdecel := True
5355  5366 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
5356  5367 Perf_Ads_Dpkg.Fi_Enabled := False
5357  5368 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
5358  5369 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
5359  5370 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
5360  5371 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
5361  5372 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
5362  5373 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
5363  5374 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
5364  5375 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim := True
5365  5376 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim := False
5366  5377 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
5367  5378 Perf_Background_Dpkg.Psappspdlat := True
5368  5379 Perf_Dpkg.Pcengoutprds := Altpln
5369  5380
5370  5381 Perf_Background_DPkg.Pscurcas := 5.0
5371  5382 Perf_Background_DPkg.Pscurmach := 5.0
5372  5383 Perf_Background_DPkg.Pscurtas := 5.0
5373  5384 Perf_Background_Dpkg.Pcitin.Itinerary := No_Itinerary
5374  5385 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
5375  5386 Perf_Background_Dpkg.Pstogwtval := True
5376  5387 Perf_Background_Dpkg.Pstogwt := 50.0
5377  5388 Perf_Background_Dpkg.Pcgwind := valid
5378  5389 Perf_Background_Dpkg.Psgw := 0.0
5379  5390 Perf_Dpkg.Gross_Weight.Status := Valid
5380  5391 Perf_Dpkg.Gross_Weight.Data := 150.0
5381  5392 Perf_Integration_DPkg.Pcairbrakes := Fullab
5382  5393 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
```

```
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
Perf_Background_Dpkg.Psstpclbact := True
Perf_Background_Dpkg.Psstpdesact := True
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.011
Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid := True
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 10.01
Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid := True
Perf_Background_Dpkg.Pccuraltcstr.Valid := True
Perf_Background_Dpkg.Pcprebcalt.Valid := True
Perf_Background_Dpkg.Pcgmttime.Hour := 2
Perf_Background_Dpkg.Pcgmttime.Minute := 2
Perf_Background_Dpkg.Pcgmttime.Second := 2
Perf_Background_Dpkg.Psinertvs := 5.0
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
Perf_Ads_Dpkg.Pr_Enabled := False
ATC_DISCRETES_PKG:body.Adson_Flag := False
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
^Noise_Speed_Val := True
^Noise_TSPD.valid := True
^Noise_TSPD.Data  := 150.0
^Noise_End_Alt    := 300.0
^Noise_Speed      := 250.0
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start  := True
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36080.0
Perf_Background_Dpkg.Noise_Data.Altitude.Data := 0.0
Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
Perf_Background_Dpkg.Noise_Data.Speed.Data := 0.0
Perf_Background_Dpkg.Noise_Data.Speed.Valid := False
Perf_Background_Dpkg.Noise_Data.Tspd.Data  := 0.0
Perf_Background_Dpkg.Noise_Data.Tspd.Valid := False

```

```
5427  5438 Perf_Background_Dpkg.Psacalt := 50.0
5428  5439 Perf_Background_Dpkg.Psacaltv:= True
5429  5440 Perf_Background_Dpkg.Pstruetrkv := True
5430  5441 Perf_Background_Dpkg.Psvgrnd           := 1.0
5431  5442 Perf_Background_Dpkg.Psvgrndval        := True
5432  5443 Perf_Background_Dpkg.Pcacposn.Data.Lat := 100.0
5433  5444 Perf_Background_Dpkg.Pcacposn.Data.Lon := 100.0
5434  5445 Perf_Background_Dpkg.Pcacposn.Valid    := false
5435  5446 Perf_Background_Dpkg.Pstruetrack       := 0.2
5436  5447 Perf_Background_Dpkg.Pswindbrg         := 150.0
5437  5448 Perf_Background_Dpkg.Pswindmag         := 130.0
5438  5449 Perf_Background_Dpkg.Pswindval         := false
5439  5450 Fmcs_Partition_Data_Pkg.Ops_Time.Hour    := 1
5440  5451 Fmcs_Partition_Data_Pkg.Ops_Time.Minute  := 1
5441  5452 Fmcs_Partition_Data_Pkg.Ops_Time.Second  := 1
5442  5453 Perf_Dpkg.Psnumengout                    := 1
5443  5454 Perf_Background_Dpkg.Psvgonpath          := true
5444  5455 Perf_Background_Dpkg.Pscrzalt.data       := 10.0
5445  5456 Perf_Background_Dpkg.Pscrzalt.Valid      := false
5446  5457 Perf_Background_Dpkg.Psfinaldes          := false
5447  5458 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas := 230.0
5448  5459 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt := 15000.0
5449  5460 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type := Vg_Ext_Tpkg.Clb_Spd_Lim
5450  5461 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident      := "ABCD   "
5451  5462 Perf_Background_Dpkg.Pcactorsec                       := Active
5452  5463 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply  := False
5453  5464 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Ident  := "1234567"
5454  5465 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.CAS    := 120.0
5455  5466 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.REASON := Returntoecon
5456  5467 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.AIRBRAKE := false
5457  5468 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.SPARE1  := 1
5458  5469 Perf_Background_Dpkg.Psfirstpass := False
5459  5470 Perf_Background_Dpkg.Psonofrstpas := False
5460  5471 Perf_Background_Dpkg.Psftpbwritok := False
5461  5472 Perf_Background_Dpkg.Pslvlatbcalt := True
5462  5473 Perf_Integration_Dpkg.Pslvlblwpth := True
5463  5474 Perf_Background_Dpkg.Psfi_Possble := True
5464  5475 Perf_Background_Dpkg.On_Icao_Leg_Decel := True
5465  5476 Perf_Background_Dpkg.Psignorehm := True
5466  5477 Perf_Integration_Dpkg.Pcoldwspdchg := Icaolimited
5467  5478 Perf_Background_Dpkg.Adc_Fg_Valid  := False
5468  5479 Perf_Background_Dpkg.Psenginesoff := True
5469  5480 Perf_Dpkg.Pcdelspdrec.Predicted   := True
5470  5481 Perf_Background_Dpkg.Pcoldeconcas.Valid := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
5471  5482 Prf_Bkgnd_Pkg:body.Fgspdsvalid          := True
5472  5483 
5473  5484 Perf_Dpkg.takeoff_gwt.valid := True
5474  5485 #Perf_Dpkg.takeoff_gwt.data := 400.0
5475  5486 
5476  5487 Perf_Background_Dpkg.Pcfltphase := Approach
5477  5488 Perf_Dpkg.Pcfirstpred(Active)     := True
5478  5489 Perf_Background_Dpkg.Pcspeedmode  := Perf_Ext_Tpkg.Vmspd
5479  5490 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
5480  5491 Perf_Background_Dpkg.Pcspdtgttag := Cas
5481  5492 Perf_Background_Dpkg.Pssspdtarget := 0.0
5482  5493 Perf_Background_Dpkg.Psfpatgt    := 0.0
5483  5494 Perf_Background_Dpkg.Psfpaact    := False
5484  5495 Guid_Spds_Dpkg.Vc3prtlimcas                        := 1.0
5485  5496 Perf_Background_Dpkg.Psrtrntocas                   := 0.0
5486  5497 Perf_Background_Dpkg.Pcpredcount(Active)          := 2
5487  5498 Perf_Dpkg.Psfrstactprd                            := False
5488  5499 Perf_Background_Dpkg.Pcspdchgtgt.Apply            := True
5489  5500 Perf_Background_Dpkg.Psdestqnh.Valid  := False
5490  5501 Perf_Background_Dpkg.Pcdestglidx      := 1
5491  5502 Perf_Background_Dpkg.Pcvertmode       := Perf_Int_Base_Tpkg.Openclb
5492  5503 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
5493  5504 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := false
5494  5505 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
5495  5506 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
5496  5507 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas:= 200.0
5497  5508 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off := True
5498  5509 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected  :=
           »  True
5499  5510 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Mach_Target     := 1.0
5500  5511 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Mach_Target := True
5501  5512 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Speed_Target    := 0.0
5502  5513 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True
5503  5514 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3  := True
5504  5515 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
           »  := True
5505  5516 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target  := True
5506  5517 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target       := 57.3066
5507  5518 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas                       := True
5508  5519 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side1 := True
5509  5520 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side2 := True
5510  5521 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.PRIM_Cas_Side1 := 150.0
5511  5522 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.PRIM_Cas_Side2 := 151.0
5512  5523 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
5513  5524 Guid_Spds_Dpkg.Vc3curspds.Fltphase := Approach
5514  5525
5515  5526 -- Reset Output
5516  5527 Perf_Background_Dpkg.Speed_Annunciation.Cas             := 0.0
5517  5528 Perf_Background_Dpkg.Speed_Annunciation.Alt             := 0.0
5518  5529 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  := Vg_Ext_Tpkg.Invalid
5519  5530 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       := "       "
5520  5531 Perf_Background_Dpkg.Flex_Isadev.Data := 5.0
5521  5532 #define Puxoveralt_Exec := False
5522  5533 Perf_Integration_Dpkg.Pcspdchgident := "7654321"
5523  5534 Guid_Ext_Dpkg.Gcxxlatautoc := True
5524  5535 Perf_Background_Dpkg.Pslimited := false
5525  5536 Perf_Background_Dpkg.Pcpathref := Onpath
5526  5537 Perf_Background_Dpkg.Pcspdchgtgt.Apply  := true
5527  5538 Perf_Background_Dpkg.Pcspdchgtgt.Ident  := "1111111"
5528  5539 Perf_Background_Dpkg.Pcspdchgtgt.CAS    := 0.0
5529  5540 Perf_Background_Dpkg.Pcspdchgtgt.REASON := Icaolimited
5530  5541 Perf_Background_Dpkg.Pcspdchgtgt.AIRBRAKE := true
5531  5542 Perf_Background_Dpkg.Pcspdchgtgt.SPARE1   := 0
5532  5543 Perf_Background_Dpkg.Psdestqnh.Data   := 0.0
5533  5544 Perf_Background_Dpkg.Psvsact := false
5534  5545 Perf_Background_Dpkg.Psfpaact := false
5535  5546
5536  5547 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
5537  5548 #go
5538  5549 Computoldtgt := True
5539  5550 Curspdsval := False
5540  5551 #sba Prf_External_Util_Pkg.Puxoveralt after_elab begin
5541  5552 #define Puxoveralt_Exec := True
5542  5553 #go
5543  5554 #end
5544  5555 --this breakpiont is set to verify the GWT of PERF_SDD_07501_INT
5545       ~~#sba prf_bkgnd_pkg.get_bk_Data #889~~
      5556 #sba prf_bkgnd_pkg.get_bk_Data #896
5546  5557 #go
5547  5558 Perf_Background_Dpkg.Psgw = 150.0
5548  5559 --this breakpiont is set to verify PERF_SDD_07502_INT
5549       ~~#sba prf_bkgnd_pkg.get_bk_Data #914~~
      5560 #sba prf_bkgnd_pkg.get_bk_Data #921
5550  5561 #go
5551  5562 Perf_Background_Dpkg.Pcspdtgttag = Fmcs_Base_Types.Mach
5552  5563 Perf_Background_Dpkg.Psspdtarget = 1.0
5553       ~~#delba prf_bkgnd_pkg.get_bk_Data #914~~
      5564 #delba prf_bkgnd_pkg.get_bk_Data #921
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

5554	5565	--this breakpiont is set to verify PERF_SDD_07503_INT
5555		~~#sba prf_bkgnd_pkg.get_bk_Data #938~~
	5566	#sba prf_bkgnd_pkg.get_bk_Data #945
5556	5567	#go
5557	5568	Perf_Background_Dpkg.Pcspdtgttag /= Fmcs_Base_Types.Cas
5558	5569	Perf_Background_Dpkg.Psspdtarget = 1.0
5559		~~#delba prf_bkgnd_pkg.get_bk_Data #938~~
	5570	#delba prf_bkgnd_pkg.get_bk_Data #945
5560	5571	--this breakpiont is set to verify PERF_SDD_07542_INT
5561		~~#sba prf_bkgnd_pkg.get_bk_Data #1198~~
	5572	#sba prf_bkgnd_pkg.get_bk_Data #1205
5562	5573	#go
5563	5574	
5564	5575	Perf_Background_Dpkg.Pcspdchgtgt.Apply = false
5565	5576	Perf_Background_Dpkg.Pshmdecel = False
5566		~~#delba prf_bkgnd_pkg.get_bk_Data #1198~~
	5577	#delba prf_bkgnd_pkg.get_bk_Data #1205
5567	5578	
5568	5579	
5569	5580	!run_test()
5570	5581	
5571	5582	-- OUTPUTS
5572	5583	Perf_Background_Dpkg.Psgw = 150.0
5573	5584	Perf_Background_Dpkg.Psdestqnh.Data = 1013.0
5574	5585	Perf_Background_Dpkg.Pcvertmode = Perf_Int_Base_Tpkg.Econo
5575	5586	Puxoveralt_Exec =True
5576	5587	Perf_Background_Dpkg.Pcspdchgtgt.Apply = False
5577	5588	Perf_Background_Dpkg.Pcpathref = INVALIDPATH
5578	5589	Perf_Background_Dpkg.Psgw = 150.0
5579	5590	Perf_Background_Dpkg.Pcspeedmode = Perf_Ext_Tpkg.Vmecon
5580	5591	Perf_Background_Dpkg.Psfpatgt = 1.0
5581	5592	Perf_Background_Dpkg.Psfpaact = True
5582	5593	Perf_Background_Dpkg.Psvsact /= True
5583	5594	Perf_Background_Dpkg.Pcfltphase = Approach
5584	5595	Perf_Background_Dpkg.Psautolat = True
5585	5596	Perf_Background_Dpkg.Psappspdlat = True
5586	5597	Perf_Integration_Dpkg.Pcdeslimlat.Spdlim = True
5587	5598	Perf_Integration_Dpkg.Pcdeslimlat.Icaolim = False
5588	5599	Perf_Background_Dpkg.Psrtrntocas = 1.0
5589	5600	Perf_Background_Dpkg.Pslimited = True
5590	5601	Perf_Background_Dpkg.Pcspdchgtgt.Apply /= true
5591	5602	Perf_Background_Dpkg.Pcspdchgtgt.Ident = "1234567"
5592	5603	Perf_Background_Dpkg.Pcspdchgtgt.CAS = 120.0
5593	5604	Perf_Background_Dpkg.Pcspdchgtgt.REASON = Returntoecon

```
Perf_Background_Dpkg.Pcspdchgtgt.AIRBRAKE = false
Perf_Background_Dpkg.Pcspdchgtgt.SPARE1  = 1
Perf_Integration_Dpkg.Pcspdchgident = "1234567"

-----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 30
    If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
» s are on,
    the aircraft gross weight shall be set to any one of the following:
   - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
» craft
     gross weight and Take Off gross weight being valid
   - Aircraft GW from the Performance Weights function,  if the flight phase is other
     than takeoff or before, or the aircraft gross weight or the Take Off gross weight
     being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT
    --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is active,engines ar
» e off,
    --the flight phase is Takeoff,the aircraft gross weight and Take Off gross weight being valid, then Aircraft Takeo
» ff GW
    --from the Performance Weights function

    If the mach target and the fcu mach selected mode retrieved from IO via Io_Fg_Fm_Internal_Dpkg.Mach_Target are val
» id,
    then the speed target tag and the speed target are not set.
    PERF_SDD_07502_INT
    If the CAS target from IO is valid and the fcu mach selected mode retrieved from IO is valid,
    then the speed target tag and the speed target are not set.
    PERF_SDD_07503_INT
    --In this tese case, the mach target and the CAS target are valid, but the fcu mach selected mode is invalid
    When the FPA mode active and the target retrieved from IO are valid,
    then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
    The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
»  retrieved
    from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
» rom ft/min
    to ft/sec. The flag indicating the vertical speed mode active is set to True.
    PERF_SDD_07504_INT
    --In this test case, the target retrieved from IO are valid but the FPA mode active is not valid(Fpa_Mode_Active.D
» ata= false),
    -- the Vertical Speed mode active and the target retrieved from IO are valid
    The destination QNH data shall be initialized to standard QNH if it is invalid with the destination being defined
    PERF_SDD_07505_INT
   --In this test case, the destination is being defined but the destination QNH data is valid
    If the current itinerary is neither Current Mode Predictions (Normal or High priority)
    nor Pred_to_alt itinerary, then the vertical mode(Pcvertmode) shall be set to Econ mode.
    PERF_SDD_07506(PERF_SRD_6192)
    --In this test case,the current itinerary is Current_Mode_Hi_Pri.
     ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is t
» he first pass
    of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
    PERF_SDD_08225_INT
    --In this test case, only the Flifht phase is Take off, the other are satisfied
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07501_INT, PERF_SDD_07502_INT, PERF_SDD_07503_INT, PERF_SDD_07504_INT,
                                    PERF_SDD_07505_INT, PERF_SDD_07506(PERF_SRD_6192),PERF_SDD_08225_INT
    SUPPORTING REQUIREMENTS : N/A


--INPUTS
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Takeoff
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := False
Perf_Background_Dpkg.Psautolat := True
Guid_Ext_Dpkg.Gcxxlatautoc := False
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
Perf_Background_Dpkg.Psengout := True
Cdk_Vert_Dpkg:Body.Engine_Out_I := False
Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
Perf_Dpkg.Repredict_Hm_Decel := True
Perf_Background_DPkg.Pshmdecel := True
Perf_Background_Dpkg.Pcholdflags.Hmactive := True
Perf_Ads_Dpkg.Fi_Enabled := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
5672  5683 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
5673  5684 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
5674  5685 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
5675  5686 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
5676  5687 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
5677  5688 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
5678  5689 Perf_Background_Dpkg.Psappspdlat := True
5679  5690 Perf_Dpkg.Pcengoutprds := Altpln
5680  5691 Perf_Background_Dpkg.Pcpathref := Onpath
5681  5692 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
5682  5693 Perf_Background_DPkg.Pscurcas := 5.0
5683  5694 Perf_Background_DPkg.Pscurmach := 5.0
5684  5695 Perf_Background_DPkg.Pscurtas := 5.0
5685  5696 Perf_Background_Dpkg.Pcitin.Itinerary := Current_Mode_Hi_Pri
5686  5697 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
5687  5698 Perf_Background_Dpkg.Pstogwtval := True
5688  5699 Perf_Background_Dpkg.Pstogwt := 50.0
5689  5700 Perf_Background_Dpkg.Pcgwind := valid
5690  5701 Perf_Background_Dpkg.Psgw := 0.0
5691  5702 Perf_Dpkg.Gross_Weight.Status := valid
5692  5703 Perf_Dpkg.Gross_Weight.Data := 150.0
5693  5704 Perf_Integration_DPkg.Pcairbrakes := Fullab
5694  5705 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
5695  5706 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
5696  5707 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
5697  5708 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
5698  5709 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
5699  5710 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
5700  5711 Perf_Background_Dpkg.Psstpclbact := True
5701  5712 Perf_Background_Dpkg.Psstpdesact := True
5702  5713 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
5703  5714 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
5704  5715 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
5705  5716 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
5706  5717 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
5707  5718 Perf_Background_Dpkg.Pcprebcalt.Valid := True
5708  5719 Perf_Background_Dpkg.Pcgmttime.Hour := 2
5709  5720 Perf_Background_Dpkg.Pcgmttime.Minute := 2
5710  5721 Perf_Background_Dpkg.Pcgmttime.Second := 2
5711  5722 Perf_Background_Dpkg.Psinertvs := 5.0
5712  5723 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
5713  5724 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
5714  5725 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
5715  5726 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
5716   5727 Perf_Ads_Dpkg.Pr_Enabled := False
5717   5728 ATC_DISCRETES_PKG:body.Adson_Flag := False
5718   5729 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
5719   5730 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
5720   5731 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
5721   5732 ^Noise_Speed_Val := True
5722   5733 ^Noise_TSPD.valid := True
5723   5734 ^Noise_TSPD.Data  := 150.0
5724   5735 ^Noise_End_Alt    := 300.0
5725   5736 ^Noise_Speed      := 250.0
5726   5737 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start  := True
5727   5738 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
5728   5739 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
5729   5740 Perf_Background_Dpkg.Psorgalt := 36080.0
5730   5741 Perf_Background_Dpkg.Noise_Data.Altitude.Data := 0.0
5731   5742 Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
5732   5743 Perf_Background_Dpkg.Noise_Data.Speed.Data := 0.0
5733   5744 Perf_Background_Dpkg.Noise_Data.Speed.Valid := False
5734   5745 Perf_Background_Dpkg.Noise_Data.Tspd.Data  := 0.0
5735   5746 Perf_Background_Dpkg.Noise_Data.Tspd.Valid := False
5736   5747
5737   5748 Perf_Background_Dpkg.Psacalt := 50.0
5738   5749 Perf_Background_Dpkg.Psacaltv:= True
5739   5750 Perf_Background_Dpkg.Pstruetrkv := True
5740   5751 Perf_Background_Dpkg.Psvgrnd           := 1.0
5741   5752 Perf_Background_Dpkg.Psvgrndval        := True
5742   5753 Perf_Background_Dpkg.Pcacposn.Data.Lat := 100.0
5743   5754 Perf_Background_Dpkg.Pcacposn.Data.Lon := 100.0
5744   5755 Perf_Background_Dpkg.Pcacposn.Valid    := false
5745   5756 Perf_Background_Dpkg.Pstruetrack       := 0.2
5746   5757 Perf_Background_Dpkg.Pswindbrg         := 150.0
5747   5758 Perf_Background_Dpkg.Pswindmag         := 130.0
5748   5759 Perf_Background_Dpkg.Pswindval         := false
5749   5760 Fmcs_Partition_Data_Pkg.Ops_Time.Hour    := 1
5750   5761 Fmcs_Partition_Data_Pkg.Ops_Time.Minute  := 1
5751   5762 Fmcs_Partition_Data_Pkg.Ops_Time.Second  := 1
5752   5763 Perf_Dpkg.Psnumengout                    := 1
5753   5764 Perf_Background_Dpkg.Psvgonpath          := true
5754   5765 Perf_Background_Dpkg.Pscrzalt.data       := 10.0
5755   5766 Perf_Background_Dpkg.Pscrzalt.Valid      := false
5756   5767 Perf_Background_Dpkg.Psfinaldes          := false
5757   5768 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas := 230.0
5758   5769 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt := 15000.0
5759   5770 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type := Vg_Ext_Tpkg.Clb_Spd_Lim
```

```
Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident      := "ABCD   "
Perf_Background_Dpkg.Pcactorsec                       := Active
Perf_Dpkg.Pcfirstpred(Active)   := true
Perf_Background_Dpkg.Psenginesoff := True
Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.011
Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid := True
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 10.01
Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid := True
Perf_Background_Dpkg.Psfirstpass := False
Perf_Background_Dpkg.Psonofrstpas := False
Perf_Background_Dpkg.Psftpbwritok := False
Perf_Background_Dpkg.Pslvlatbcalt := True
Perf_Integration_Dpkg.Pslvlblwpth := True
Perf_Background_Dpkg.Psfi_Possble := True
Perf_Background_Dpkg.On_Icao_Leg_Decel := True
Perf_Background_Dpkg.Psignorehm := True
Perf_Integration_Dpkg.Pcoldwspdchg := Icaolimited
Perf_Background_Dpkg.Adc_Fg_Valid  := False
Perf_Dpkg.Pcdelspdrec.Predicted   := True
Perf_Background_Dpkg.Pcoldeconcas.Valid := True
Perf_Dpkg.takeoff_gwt.valid := true
#Perf_Dpkg.takeoff_gwt.data := 410.0
Perf_Background_Dpkg.Pcspdtgttag := Cas
Perf_Background_Dpkg.Psspdtarget := 0.0
Perf_Background_Dpkg.Psfpatgt    := 0.0
Perf_Background_Dpkg.Psfpaact     := False
Perf_Integration_Dpkg.Psvstgt    := 0.0
Perf_Background_Dpkg.Psvsact     := False
Perf_Background_Dpkg.Psdestqnh.Valid  := True
Perf_Background_Dpkg.Pcdestglidx      := 1
Perf_Background_Dpkg.Psdestqnh.Data   := 0.0
Perf_Background_Dpkg.Pcvertmode       := Perf_Int_Base_Tpkg.Openclb
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off := true
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected  :=
»  False
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Mach_Target    := 1.0
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Mach_Target  := True
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Speed_Target  := 1.0
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target   := True
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3           := True
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
» := False
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target    := True
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target       := 49.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
5802  5813 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active :=
           » True
5803  5814 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target  := True
5804  5815 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target  := 60.0
5805  5816 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
5806  5817 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
5807  5818 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
5808  5819 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
5809  5820 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 20000
5810  5821 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat:=79.0
5811  5822 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas := 60.0
5812  5823 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach := 0.5
5813  5824 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas := 49.0
5814  5825 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
5815  5826 CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt   :=25001.1
5816  5827 Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt := 25001.0
5817  5828 Guid_Spds_Dpkg.Vc3curspds.Fltphase := Takeoff
5818  5829
5819  5830 -- Reset Output
5820  5831 Perf_Background_Dpkg.Speed_Annunciation.Cas             := 0.0
5821  5832 Perf_Background_Dpkg.Speed_Annunciation.Alt             := 0.0
5822  5833 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  := Vg_Ext_Tpkg.Invalid
5823  5834 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       := "       "
5824  5835 Perf_Background_Dpkg.Flex_Isadev.Data := 5.0
5825  5836 Perf_Background_Dpkg.Psvsact := True
5826  5837 Perf_Background_Dpkg.Psfpaact := True
5827  5838 Perf_Background_Dpkg.Pcspeedmode         := Perf_Ext_Tpkg.Vmnone
5828  5839 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt := 0.0
5829  5840
5830  5841 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
5831  5842 # go
5832  5843 Computoldtgt := True
5833  5844 Curspdsval := False
5834  5845 #DELB/ALL
5835  5846 --this breakpiont is set to verify the GWT of PERF_SDD_07501_INT
5836       ~~#sba prf_bkgnd_pkg.get_bk_Data #889~~
      5847 #sba prf_bkgnd_pkg.get_bk_Data #896
5837  5848 #go
5838  5849 Perf_Background_Dpkg.Psgw = 410.0
5839       ~~#delba prf_bkgnd_pkg.get_bk_Data #889~~
      5850 #delba prf_bkgnd_pkg.get_bk_Data #896
5840  5851 --this breakpiont is set to verify PERF_SDD_07502_INT
5841       ~~#sba prf_bkgnd_pkg.get_bk_Data #914~~
      5852 #sba prf_bkgnd_pkg.get_bk_Data #921
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
5842  5853 #go
5843  5854 Perf_Background_Dpkg.Pcspdtgttag /= Fmcs_Base_Types.Mach
5844  5855 Perf_Background_Dpkg.Psspdtarget /= 1.0
5845       ~~#delba prf_bkgnd_pkg.get_bk_Data #914~~
      5856 #delba prf_bkgnd_pkg.get_bk_Data #921
5846  5857 --this breakpiont is set to verify PERF_SDD_07503_INT
5847       ~~#sba prf_bkgnd_pkg.get_bk_Data #938~~
      5858 #sba prf_bkgnd_pkg.get_bk_Data #945
5848  5859 #go
5849  5860 Perf_Background_Dpkg.Pcspdtgttag = Cas
5850  5861 Perf_Background_Dpkg.Psspdtarget = 1.0
5851  5862 !run_test()
5852  5863 
5853  5864 -- OUTPUTS
5854  5865 Perf_Background_Dpkg.Psdestqnh.Data     /= 1013.0
5855  5866 Perf_Background_Dpkg.Pcvertmode         /= Perf_Int_Base_Tpkg.Econo
5856  5867 Perf_Background_Dpkg.Psgw               = 400.0
5857  5868 Perf_Background_Dpkg.Psfpaact           /= True
5858  5869 Perf_Background_Dpkg.Psvsact            = True
5859  5870 Perf_Background_Dpkg.Psfpatgt           /= 0.86
5860  5871 Perf_Integration_Dpkg.Psvstgt           = 1.0
5861  5872 Perf_Background_Dpkg.Pcspeedmode        /= Perf_Ext_Tpkg.Vmecon
5862  5873 -----------------------------------------------------------------------------------------------------------------------
           » --
5863  5874 TESTID: 31
5864  5875 
5865  5876     When the flight phase is Descent, the descent path reference shall be set to
5866  5877     the guidance descent path reference(Va3pathref).
5867  5878     PERF_SDD_07500_INT
5868  5879 
5869  5880     If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
           » s are on,
5870  5881     the aircraft gross weight shall be set to any one of the following:
5871  5882    - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
           » craft
5872  5883      gross weight and Take Off gross weight being valid
5873  5884    - Aircraft GW from the Performance Weights function,  if the flight phase is other
5874  5885      than takeoff or before, or the aircraft gross weight or the Take Off gross weight
5875  5886      being invalid
5876  5887     The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
5877  5888     PERF_SDD_07501_INT
5878  5889     --In this test case,the current itinerary is Fuel_Plan_Fpln_Preds,the aircraft gross weight not be set.
5879  5890 
5880  5891     If the mach target and the fcu mach selected mode retrieved from IO via Io_Fg_Fm_Internal_Dpkg.Mach_Target are inv
```

```
             » alid,
 5881  5892     then the speed target tag shall not be set to indicate Mach and the speed target is not set the value of mach targ
             » et.
 5882  5893     PERF_SDD_07502_INT (Here do robust testing of PERF_SDD_07502_INT)
 5883  5894     If the CAS target from IO is valid and the fcu mach selected mode retrieved from IO is invalid,
 5884  5895     then the speed target tag shall not be set to indicate CAS and the speed target is not set the value of CAS target
             » .
 5885  5896     PERF_SDD_07503_INT (Here do robust testing of PERF_SDD_07503_INT)
 5886  5897    --In this test case, the mach target and the CAS target are invalid(negative case)
 5887  5898     When the FPA mode active and the target retrieved from IO are valid,
 5888  5899     then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
 5889  5900     The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
             »  retrieved
 5890  5901     from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
             » rom ft/min
 5891  5902     to ft/sec. The flag indicating the vertical speed mode active is set to True.
 5892  5903     --In this test case, the Fpa_Mode_Active.Valid and Vspd_Mode_Active.Valid is false
 5893  5904     PERF_SDD_07504_INT (Here do robust testing of PERF_SDD_07504_INT)
 5894  5905
 5895  5906     ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is th
             » e first pass
 5896  5907     of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
 5897  5908     PERF_SDD_08225_INT
 5898  5909     --In this test case, all the condition are true and FLIGHT PHASE is descent
 5899  5910     During descent or approach with current target speeds from FG are valid, ECON CAS limited by speed constraint othe
             » r than
 5900  5911     speed limit shall be set to current CAS speed if partially limited managed speed target is zero else it is set to
 5901  5912     partially limited managed speed target.
 5902  5913     PERF_SDD_07540
 5903  5914     --In this test case, current target speeds from FG are valid, and partially limited managed speed target is zero
 5904  5915     During descent or approach with current target speeds from FG are valid, if speed limit or ICAO limit is latched i
             » n descent
 5905  5916     then ECON/LRC (based on the selected flight criterion), CAS limited flag shall be set to true.
 5906  5917     PERF_SDD_08227_INT
 5907  5918     --In this test case,current target speeds from FG are valid, speed limit is false, ICAO limit is true
 5908  5919     If current target speeds from FG are valid, then the speed change target restriction record from VG is copied to P
             » erf and
 5909  5920     the speed change apply flag shall be set if the aircraft is in the deceleration zone to HM.
 5910  5921     PERF_SDD_07542_INT
 5911  5922     --In this test case, current target speeds from FG are valid, and the aircraft is in the deceleration zone
 5912  5923
 5913  5924     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07501_INT, PERF_SDD_07502_INT, PERF_SDD_07503_INT, PERF_SDD_07504_INT,
 5914  5925                                     PERF_SDD_07540, PERF_SDD_08227_INT, PERF_SDD_08225_INT
 5915  5926                                     PERF_SDD_07542_INT, PERF_SDD_07500_INT
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
    SUPPORTING REQUIREMENTS : N/A


--INPUTS
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Descent
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := False
Perf_Background_Dpkg.Psautolat := True
Guid_Ext_Dpkg.Gcxxlatautoc := False
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
Perf_Background_Dpkg.Psengout := True
Cdk_Vert_Dpkg:Body.Engine_Out_I := False
Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
Guid_Checkpoint_Resynch_Dpkg.Va3holdflags.Hmdecel := True
Perf_Dpkg.Pshmdeleted := false
Perf_Dpkg.Repredict_Hm_Decel := True
Perf_Background_DPkg.Pshmdecel := True
Perf_Background_Dpkg.Pcholdflags.Hmactive := True
Perf_Ads_Dpkg.Fi_Enabled := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim := True
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
Perf_Background_Dpkg.Psappspdlat := True
Perf_Dpkg.Pcengoutprds := Altpln
Perf_Background_Dpkg.Pcpathref := Onpath
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
5960  5971 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
5961  5972 Perf_Background_DPkg.Pscurcas := 5.0
5962  5973 Perf_Background_DPkg.Pscurmach := 5.0
5963  5974 Perf_Background_DPkg.Pscurtas := 5.0
5964  5975 Perf_Background_Dpkg.Pcitin.Itinerary := Fuel_Plan_Fpln_Preds
5965  5976 Perf_Background_Dpkg.Pcactorsec := Active
5966  5977 Perf_Dpkg.Pcfirstpred(Active)                     := True
5967  5978 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
5968  5979 Perf_Background_Dpkg.Pstogwtval := False
5969  5980 Perf_Background_Dpkg.Pstogwt := 50.0
5970  5981 Perf_Background_Dpkg.Pcgwind := Invalid
5971  5982 Perf_Background_Dpkg.Psgw := 0.0
5972  5983 Perf_Dpkg.Gross_Weight.Status := Valid
5973  5984 Perf_Dpkg.Gross_Weight.Data := 150.0
5974  5985 Perf_Integration_DPkg.Pcairbrakes := Fullab
5975  5986 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
5976  5987 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
5977  5988 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
5978  5989 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
5979  5990 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
5980  5991 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
5981  5992 Perf_Background_Dpkg.Psstpclbact := True
5982  5993 Perf_Background_Dpkg.Psstpdesact := True
5983  5994 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
5984  5995 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
5985  5996 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.011
5986  5997 Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid := True
5987  5998 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 10.01
5988  5999 Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid := False
5989  6000 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
5990  6001 Perf_Background_Dpkg.Pcprebcalt.Valid := True
5991  6002 Perf_Background_Dpkg.Pcgmttime.Hour := 2
5992  6003 Perf_Background_Dpkg.Pcgmttime.Minute := 2
5993  6004 Perf_Background_Dpkg.Pcgmttime.Second := 2
5994  6005 Perf_Background_Dpkg.Psinertvs := 5.0
5995  6006 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
5996  6007 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
5997  6008 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
5998  6009 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
5999  6010 Perf_Ads_Dpkg.Pr_Enabled := False
6000  6011 ATC_DISCRETES_PKG:body.Adson_Flag := False
6001  6012 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
6002  6013 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
6003  6014 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
```

```
6004  6015  ^Noise_Speed_Val := True
6005  6016  ^Noise_TSPD.valid := True
6006  6017  ^Noise_TSPD.Data  := 150.0
6007  6018  ^Noise_End_Alt    := 300.0
6008  6019  ^Noise_Speed      := 250.0
6009  6020  Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start  := True
6010  6021  Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
6011  6022  Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
6012  6023  Perf_Background_Dpkg.Psorgalt := 36080.0
6013  6024  Perf_Background_Dpkg.Noise_Data.Altitude.Data := 0.0
6014  6025  Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
6015  6026  Perf_Background_Dpkg.Noise_Data.Speed.Data := 0.0
6016  6027  Perf_Background_Dpkg.Noise_Data.Speed.Valid := False
6017  6028  Perf_Background_Dpkg.Noise_Data.Tspd.Data  := 0.0
6018  6029  Perf_Background_Dpkg.Noise_Data.Tspd.Valid := False
6019  6030  Perf_Background_Dpkg.Pcfltphase := Takeoff
6020  6031  Perf_Background_Dpkg.Psacalt := 50.0
6021  6032  Perf_Background_Dpkg.Psacaltv:= True
6022  6033  Perf_Background_Dpkg.Pstruetrkv := True
6023  6034  Perf_Background_Dpkg.Psvgrnd           := 1.0
6024  6035  Perf_Background_Dpkg.Psvgrndval        := True
6025  6036  Perf_Background_Dpkg.Pcacposn.Data.Lat := 100.0
6026  6037  Perf_Background_Dpkg.Pcacposn.Data.Lon := 100.0
6027  6038  Perf_Background_Dpkg.Pcacposn.Valid    := false
6028  6039  Perf_Background_Dpkg.Pstruetrack       := 0.2
6029  6040  Perf_Background_Dpkg.Pswindbrg         := 150.0
6030  6041  Perf_Background_Dpkg.Pswindmag         := 130.0
6031  6042  Perf_Background_Dpkg.Pswindval         := false
6032  6043  Fmcs_Partition_Data_Pkg.Ops_Time.Hour    := 1
6033  6044  Fmcs_Partition_Data_Pkg.Ops_Time.Minute  := 1
6034  6045  Fmcs_Partition_Data_Pkg.Ops_Time.Second  := 1
6035  6046  Perf_Dpkg.Psnumengout                    := 1
6036  6047  Perf_Background_Dpkg.Psvgonpath          := true
6037  6048  Perf_Background_Dpkg.Pscrzalt.data       := 10.0
6038  6049  Perf_Background_Dpkg.Pscrzalt.Valid      := false
6039  6050  Perf_Background_Dpkg.Psfinaldes          := false
6040  6051  Guid_Ext_Dpkg.Active_Speed_Restriction.Cas := 230.0
6041  6052  Guid_Ext_Dpkg.Active_Speed_Restriction.Alt := 15000.0
6042  6053  Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type := Vg_Ext_Tpkg.Clb_Spd_Lim
6043  6054  Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident      := "ABCD   "
6044  6055  Perf_Background_Dpkg.Psfirstpass := False
6045  6056  Perf_Background_Dpkg.Psonofrstpas := False
6046  6057  Perf_Background_Dpkg.Psftpbwritok := False
6047  6058  Perf_Background_Dpkg.Psvsact := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
6048  6059 Perf_Background_Dpkg.Psfpaact := True
6049  6060 Perf_Background_Dpkg.Pslvlatbcalt := True
6050  6061 Perf_Integration_Dpkg.Pslvlblwpth := True
6051  6062 Perf_Background_Dpkg.Psfi_Possble := True
6052  6063 Perf_Background_Dpkg.On_Icao_Leg_Decel := True
6053  6064 Perf_Background_Dpkg.Psignorehm := True
6054  6065 Perf_Integration_Dpkg.Pcoldwspdchg := Icaolimited
6055  6066 Perf_Background_Dpkg.Adc_Fg_Valid  := False
6056  6067 Perf_Dpkg.Pcdelspdrec.Predicted   := True
6057  6068 Perf_Background_Dpkg.Pcoldeconcas.Valid := True
6058  6069 Prf_Bkgnd_Pkg:body.Fgspdsvalid          := True
6059  6070 Perf_Dpkg.takeoff_gwt.valid := True
6060  6071 #Perf_Dpkg.takeoff_gwt.data := 400.0
6061  6072 Perf_Background_Dpkg.Psenginesoff := True
6062  6073 Perf_Background_Dpkg.Pcspdtgttag := Cas
6063  6074 Perf_Background_Dpkg.Psspdtarget := 0.0
6064  6075 Perf_Background_Dpkg.Psfpatgt := 0.0
6065  6076 Perf_Background_Dpkg.Psfpaact := False
6066  6077 Perf_Integration_Dpkg.Psvstgt := 0.0
6067  6078 Perf_Background_Dpkg.Psvsact  := False
6068  6079 Guid_Spds_Dpkg.Vc3prtlimcas                      := 0.0
6069  6080 Perf_Background_Dpkg.Psrtrntocas                 := 0.0
6070  6081 Perf_Background_Dpkg.Pcspdchgtgt.Apply           := True
6071  6082 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply  := False
6072  6083 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Ident  :="1234567"
6073  6084 Perf_Integration_Dpkg.Pcspdchgident              :="7654321"
6074  6085 Perf_Background_Dpkg.Psdestqnh.Valid  := False
6075  6086 Perf_Background_Dpkg.Pcdestglidx      := 0
6076  6087 Perf_Background_Dpkg.Psdestqnh.Data   := 0.0
6077  6088 Perf_Background_Dpkg.Pcvertmode       := Perf_Int_Base_Tpkg.Openclb
6078  6089 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
6079  6090 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
6080  6091 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := true
6081  6092 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := false
6082  6093 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected  :=
           »  true
6083  6094 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Mach_Target     := False
6084  6095 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Mach_Target   := 1.0
6085  6096 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Speed_Target   := 1.0
6086  6097 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target   := False
6087  6098 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3               := Fals
           » e
6088  6099 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
           » := true
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

6089	6100	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target := True
6090	6101	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target := 57.3066
6091	6102	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active := » True
6092	6103	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target := True
6093	6104	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target := 60.0
6094	6105	Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off := true
6095	6106	CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
6096	6107	
6097	6108	-- Reset Output
6098	6109	Perf_Background_Dpkg.Speed_Annunciation.Cas := 0.0
6099	6110	Perf_Background_Dpkg.Speed_Annunciation.Alt := 0.0
6100	6111	Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type := Vg_Ext_Tpkg.Invalid
6101	6112	Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident := " "
6102	6113	Perf_Background_Dpkg.Flex_Isadev.Data := 5.0
6103	6114	Perf_Background_Dpkg.Pslimited := false
6104	6115	Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmnone
6105	6116	Perf_Background_Dpkg.Psrtrntocas :=0.0
6106	6117	
6107	6118	#sba prf_bkgnd_pkg.get_bk_Data after_elaboration
6108	6119	# go
6109	6120	Computoldtgt := True
6110	6121	Curspdsval := False
6111	6122	Xoveralt := 0.0
6112	6123	#DELB/ALL
6113	6124	
6114	6125	--this breakpiont is set to verify PERF_SDD_07502_INT
6115		~~#sba prf_bkgnd_pkg.get_bk_Data #914~~
	6126	#sba prf_bkgnd_pkg.get_bk_Data #921
6116	6127	#go
6117	6128	Perf_Background_Dpkg.Psgw = 0.0 --(remain as the initlize)
6118	6129	Perf_Background_Dpkg.Pcspdtgttag /= Fmcs_Base_Types.Mach
6119	6130	Perf_Background_Dpkg.Psspdtarget /= 1.0
6120		~~#delba prf_bkgnd_pkg.get_bk_Data #914~~
	6131	#delba prf_bkgnd_pkg.get_bk_Data #921
6121	6132	--this breakpiont is set to verify PERF_SDD_07503_INT
6122		~~#sba prf_bkgnd_pkg.get_bk_Data #938~~
	6133	#sba prf_bkgnd_pkg.get_bk_Data #945
6123	6134	#go
6124	6135	Perf_Background_Dpkg.Psspdtarget /= 1.0
6125	6136	Perf_Background_Dpkg.Pcspdtgttag = Cas --(remain as the initlize)
6126	6137	--this breakpiont is set to verify PERF_SDD_07542_INT
6127		~~#sba prf_bkgnd_pkg.get_bk_Data #1198~~
	6138	#sba prf_bkgnd_pkg.get_bk_Data #1205

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
6128  6139 #go
6129  6140 #s/m 6
6130  6141 Perf_Background_Dpkg.Pcspdchgtgt.Apply = False
6131  6142 Perf_Integration_Dpkg.Pcspdchgident = "1234567"
6132  6143 Perf_Background_Dpkg.Pshmdecel = True
6133       ~~#delba prf_bkgnd_pkg.get_bk_Data #1198~~
      6144 #delba prf_bkgnd_pkg.get_bk_Data #1205
6134  6145 
6135  6146 !run_test()
6136  6147 
6137  6148 -- OUTPUTS
6138  6149 Perf_Background_Dpkg.Pcvertmode         = Perf_Int_Base_Tpkg.Econo
6139  6150 Perf_Background_Dpkg.Psfpatgt          /= 1.0
6140  6151 Perf_Background_Dpkg.Psfpaact          /= True
6141  6152 Perf_Integration_Dpkg.Psvstgt          /= 1.0
6142  6153 Perf_Background_Dpkg.Psvsact           /= true
6143  6154 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim =  False
6144  6155 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim = True
6145  6156 Perf_Background_Dpkg.Psrtrntocas = 10.01
6146  6157 Perf_Background_Dpkg.Pslimited   = True
6147  6158 Perf_Background_Dpkg.Pcspdchgtgt.Apply = True
6148  6159 Perf_Background_Dpkg.Pcspeedmode       = Perf_Ext_Tpkg.Vmecon
6149  6160 
6150  6161 -----------------------------------------------------------------------------------------------------------------------
           » --
6151  6162 TESTID: 32
6152  6163     If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
           » s are on,
6153  6164     the aircraft gross weight shall be set to any one of the following:
6154  6165    - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
           » craft
6155  6166      gross weight and Take Off gross weight being valid
6156  6167    - Aircraft GW from the Performance Weights function,  if the flight phase is other
6157  6168      than takeoff or before, or the aircraft gross weight or the Take Off gross weight
6158  6169      being invalid
6159  6170     The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
6160  6171     PERF_SDD_07501_INT
6161  6172     --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is Secondary,and eng
           » ines are off,
6162  6173 
6163  6174     The destination QNH data shall be initialized to standard QNH if it is invalid with the destination being defined
6164  6175     PERF_SDD_07505_INT
6165  6176     --In this test case, The destination QNH data is invalid but the destination not being defined
6166  6177     If the current itinerary is neither Current Mode Predictions (Normal or High priority)
```

```
    nor Pred_to_alt itinerary, then the vertical mode(Pcvertmode) shall be set to Econ mode.
    PERF_SDD_07506(PERF_SRD_6192)
    --In this test case,the current itinerary is Current_Mode_Preds

    ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is th
» e first pass
    of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
    PERF_SDD_08225_INT
    --In this test case, this is the first pass and flight phase is descent but it is not manual speed mode,
    During descent or approach with current target speeds from FG are valid, if speed limit or ICAO limit is latched i
» n descent
    then ECON/LRC (based on the selected flight criterion), CAS limited flag shall be set to true.
    PERF_SDD_08227_INT
    --In this test case, current target speeds from FG is valid During descent, speed limit and ICAO limit are all fal
» se
    Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
    are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
» d to FL250.
    PERF_SDD_07543_INT
    --in this test case, only Guid_Spds_Dpkg.Vc3Curspds.Cas.Data leaa than the lower limits, the other are satisfied
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07505_INT,PERF_SDD_07506(PERF_SRD_6192), PERF_SDD_08225_INT,PERF_SDD_0822
» 7_INT,
                                    PERF_SDD_07543_INT,PERF_SDD_07501_INT
    SUPPORTING REQUIREMENTS : N/A


--INPUTS
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Descent
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := False
Perf_Background_Dpkg.Psautolat := True
Guid_Ext_Dpkg.Gcxxlatautoc := False
```

```
6206   6217 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
6207   6218 Perf_Background_Dpkg.Psengout := True
6208   6219 Cdk_Vert_Dpkg:Body.Engine_Out_I := False
6209   6220 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
6210   6221 Perf_Dpkg.Repredict_Hm_Decel := True
6211   6222 Perf_Background_DPkg.Pshmdecel := True
6212   6223 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
6213   6224 Perf_Ads_Dpkg.Fi_Enabled := False
6214   6225 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
6215   6226 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
6216   6227 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
6217   6228 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
6218   6229 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
6219   6230 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
6220   6231 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
6221   6232 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
6222   6233 Perf_Background_Dpkg.Psappspdlat := True
6223   6234 Perf_Dpkg.Pcengoutprds := Altpln
6224   6235 Perf_Background_Dpkg.Pcpathref := Onpath
6225   6236 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmexped
6226   6237 Perf_Background_DPkg.Pscurcas := 5.0
6227   6238 Perf_Background_DPkg.Pscurmach := 5.0
6228   6239 Perf_Background_DPkg.Pscurtas := 5.0
6229   6240 Perf_Background_Dpkg.Pcitin.Itinerary := Current_Mode_Preds
6230   6241 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
6231   6242 Perf_Background_Dpkg.Pstogwtval := False
6232   6243 Perf_Background_Dpkg.Pstogwt := 50.0
6233   6244 Perf_Background_Dpkg.Pcgwind := Invalid
6234   6245 Perf_Background_Dpkg.Psgw := 0.0
6235   6246 Perf_Dpkg.Gross_Weight.Status := Invalid
6236   6247 Perf_Dpkg.Gross_Weight.Data := 150.0
6237   6248 Perf_Integration_DPkg.Pcairbrakes := Fullab
6238   6249 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
6239   6250 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
6240   6251 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
6241   6252 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
6242   6253 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
6243   6254 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
6244   6255 Perf_Background_Dpkg.Psstpclbact := True
6245   6256 Perf_Background_Dpkg.Psstpdesact := True
6246   6257 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
6247   6258 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
6248   6259 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
6249   6260 Perf_Background_Dpkg.Pcprebcalt.Valid := True
```

```
Perf_Background_Dpkg.Pcgmttime.Hour := 2
Perf_Background_Dpkg.Pcgmttime.Minute := 2
Perf_Background_Dpkg.Pcgmttime.Second := 2
Perf_Background_Dpkg.Psinertvs := 5.0
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
Perf_Ads_Dpkg.Pr_Enabled := False
ATC_DISCRETES_PKG:body.Adson_Flag := False
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
^Noise_Speed_Val := True
^Noise_TSPD.valid := True
^Noise_TSPD.Data  := 150.0
^Noise_End_Alt    := 300.0
^Noise_Speed      := 250.0
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start  := True
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := True
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36080.0
Perf_Background_Dpkg.Noise_Data.Altitude.Data := 0.0
Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
Perf_Background_Dpkg.Noise_Data.Speed.Data := 0.0
Perf_Background_Dpkg.Noise_Data.Speed.Valid := False
Perf_Background_Dpkg.Noise_Data.Tspd.Data  := 0.0
Perf_Background_Dpkg.Noise_Data.Tspd.Valid := False

Perf_Background_Dpkg.Pcfltphase := Takeoff
Perf_Background_Dpkg.Psacalt := 50.0
Perf_Background_Dpkg.Psacaltv:= True
Perf_Background_Dpkg.Pstruetrkv := True
Perf_Background_Dpkg.Psvgrnd           := 1.0
Perf_Background_Dpkg.Psvgrndval        := True
Perf_Background_Dpkg.Pcacposn.Data.Lat := 100.0
Perf_Background_Dpkg.Pcacposn.Data.Lon := 100.0
Perf_Background_Dpkg.Pcacposn.Valid    := false
Perf_Background_Dpkg.Pstruetrack       := 0.2
Perf_Background_Dpkg.Pswindbrg         := 150.0
Perf_Background_Dpkg.Pswindmag         := 130.0
Perf_Background_Dpkg.Pswindval         := false
Fmcs_Partition_Data_Pkg.Ops_Time.Hour    := 1
Fmcs_Partition_Data_Pkg.Ops_Time.Minute  := 1
```

```
6294 6305 Fmcs_Partition_Data_Pkg.Ops_Time.Second  := 1
6295 6306 Perf_Dpkg.Psnumengout                    := 1
6296 6307 Perf_Background_Dpkg.Psvgonpath          := true
6297 6308 Perf_Background_Dpkg.Pscrzalt.data       := 10.0
6298 6309 Perf_Background_Dpkg.Pscrzalt.Valid      := false
6299 6310 Perf_Background_Dpkg.Psfinaldes          := false
6300 6311 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas := 230.0
6301 6312 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt := 15000.0
6302 6313 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type := Vg_Ext_Tpkg.Clb_Spd_Lim
6303 6314 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident      := "ABCD   "
6304 6315 Perf_Background_Dpkg.Pcactorsec                       := Secondary
6305 6316 Perf_Dpkg.Pcfirstpred(Secondary)                     := True
6306 6317 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.011
6307 6318 Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid := True
6308 6319 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 9.99
6309 6320 Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid := True
6310 6321 Perf_Background_Dpkg.Psfirstpass := False
6311 6322 Perf_Background_Dpkg.Psonofrstpas := False
6312 6323 Perf_Background_Dpkg.Psftpbwritok := False
6313 6324 Perf_Background_Dpkg.Psvsact := True
6314 6325 Perf_Background_Dpkg.Psfpaact := True
6315 6326 Perf_Background_Dpkg.Pslvlatbcalt := True
6316 6327 Perf_Integration_Dpkg.Pslvlblwpth := True
6317 6328 Perf_Background_Dpkg.Psfi_Possble := True
6318 6329 Perf_Background_Dpkg.On_Icao_Leg_Decel := True
6319 6330 Perf_Background_Dpkg.Psignorehm := True
6320 6331 Perf_Integration_Dpkg.Pcoldwspdchg := Icaolimited
6321 6332 Perf_Background_Dpkg.Adc_Fg_Valid  := False
6322 6333 Perf_Background_Dpkg.Psenginesoff := True
6323 6334 Perf_Dpkg.Pcdelspdrec.Predicted   := True
6324 6335 Perf_Background_Dpkg.Pcoldeconcas.Valid := True
6325 6336 Prf_Bkgnd_Pkg:body.Fgspdsvalid          := True
6326 6337 Perf_Dpkg.takeoff_gwt.valid := True
6327 6338 #Perf_Dpkg.takeoff_gwt.data := 400.0
6328 6339 Guid_Spds_Dpkg.Vc3prtlimcas                      := 1.0
6329 6340 Perf_Background_Dpkg.Pcpredcount(Active)         := 2
6330 6341 Perf_Dpkg.Psfrstactprd                           := False
6331 6342 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply  := False
6332 6343 Perf_Background_Dpkg.Psautolat                   := True
6333 6344 Perf_Background_Dpkg.Psappspdlat                 := True
6334 6345 Perf_Background_Dpkg.Psdestqnh.Valid  := false
6335 6346 Perf_Background_Dpkg.Pcdestglidx      := 0
6336 6347 Perf_Background_Dpkg.Psdestqnh.Data   := 0.0
6337 6348 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
6338  6349 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3               := True
6339  6350 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
           » := true
6340  6351 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target         := false
6341  6352 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active :=
           » True
6342  6353 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target  := false
6343  6354 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := false
6344  6355 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := True
6345  6356 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := true
6346  6357 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := true
6347  6358 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
6348  6359 -- Reset Output
6349  6360 Perf_Background_Dpkg.Speed_Annunciation.Cas             := 0.0
6350  6361 Perf_Background_Dpkg.Speed_Annunciation.Alt             := 0.0
6351  6362 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  := Vg_Ext_Tpkg.Invalid
6352  6363 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       := "       "
6353  6364 Perf_Background_Dpkg.Flex_Isadev.Data := 5.0
6354  6365 Perf_Background_Dpkg.Pslimited := false
6355  6366 Perf_Background_Dpkg.Pcvertmode       := Perf_Int_Base_Tpkg.Openclb
6356  6367 Perf_Background_Dpkg.Pcspeedmode         := Perf_Ext_Tpkg.Vmecon
6357  6368
6358  6369 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
6359  6370 # go
6360  6371 Computoldtgt := True
6361  6372 Curspdsval := False
6362  6373 --this breakpoint is set to verify PERF_SDD_07543_INT
6363       ~~#sba prf_bkgnd_pkg.get_bk_Data #1227~~
      6374 #sba prf_bkgnd_pkg.get_bk_Data #1234
6364  6375 #go
6365  6376 Curcas  = 0.0
6366  6377 Curmach = 0.0
6367  6378 Xoveralt = 25000.0
6368       ~~#delba prf_bkgnd_pkg.get_bk_Data #1227~~
      6379 #delba prf_bkgnd_pkg.get_bk_Data #1234
6369  6380
6370  6381 !run_test()
6371  6382
6372  6383 -- OUTPUTS
6373  6384 Perf_Background_Dpkg.Pslimited          /= true
6374  6385 Perf_Background_Dpkg.Psdestqnh.Data     /= 1013.0
6375  6386 Perf_Background_Dpkg.Pcvertmode         /= Perf_Int_Base_Tpkg.Econo
6376  6387 Perf_Background_Dpkg.Psgw               = 0.0 --(remain as the initlize)
6377  6388 Perf_Background_Dpkg.Pcspeedmode        /= Perf_Ext_Tpkg.Vmecon
```

```
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim         = False
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim        = False

--------------------------------------------------------------------------------------------
TESTID: 33

    If the current itinerary is one of the following:
    - Active Primary Flight Plan Predictions;
    - Temporary Primary Flight Plan Predictions;
    -Current mode predictions(Normal or High priority);
    - Optimum altitude predictions;
    then the descent path shall be retrieved from the descent path object
    manager via a call to Perf_Ext_Despath.Pgvdespath.

    When flight phase is beyond cruise with manual speed mode, then the speed validity shall be set as follows.
        If CAS is selected on FCU then Valid flag for MACH speed is set to False.
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
    MACH is selected on FCU and A/C is below crossover altitude in this test case.
    PERF_SDD_07545_INT

    Retrieval of trip data for the current working flight plan shall be done by calling Sys_Perf_Interface_Dpkg.Pctrip
» time.
    PERF_SDD_07547_INT

    ADS enabled flags (Intermediate intent enable and Predicted route enable) shall be repacked to output on FTB1.
    PERF_SDD_07548_INT

    If the working flight plan is either Is_Active or Copy_From_Active, then ISA temperature deviation shall be comput
» ed as follows.
    ISA temperature deviation = Static air temperature + Zero degrees Celsius in degrees Kelvin - ISA standard tempera
» ture
    at an altitude.
    Where,
        - ISA standard temperature = Standard atmosphere temperature at sea level *
                                   (1.0 -  ( ( Temperature lapse rate / Standard atmosphere temperature at sea level )
»  * MinAlt ) ).
        - MinAlt is minimum altitude of the aircraft altitude and TROPOPAUSE altitude.
    PERF_SDD_07549(PERF_SRD_9587, PERF_SRD_9656_INT)

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3888_INT, PERF_SDD_07545_INT, PERF_SDD_07547_INT,
                                    PERF_SDD_07548_INT, PERF_SDD_07549(PERF_SRD_9587, PERF_SRD_9656_INT)
    SUPPORTING REQUIREMENTS : N/A


```

```
-- INPUTS

CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
Perf_Background_Dpkg.Psignorehm := True
Perf_Background_Dpkg.Pcfltphase := Goaround
Perf_Background_Dpkg.Ats_Enable := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Goaround
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Psacalt := 10000.0
Perf_Background_Dpkg.Pstropoalt := 0.0
Perf_Database_Dpkg.Psmmo := 0.45
Perf_Background_Dpkg.Pszfw := 300.0
Perf_Background_Dpkg.Psblockfuel := 50.0
Perf_Background_Dpkg.Pstaxifuel := 25.0
Perf_Background_Dpkg.Psairborne := True
Perf_Background_Dpkg.Psautolat := False
Guid_Ext_Dpkg.Gcxxlatautoc := False
Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
Perf_Background_Dpkg.Psengout := False
Cdk_Vert_Dpkg:Body.Engine_Out_I := True
Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
Perf_Dpkg.Repredict_Hm_Decel := True
Perf_Background_DPkg.Pshmdecel := True
Perf_Background_Dpkg.Pcholdflags.Hmactive := True
Perf_Ads_Dpkg.Fi_Enabled := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
Perf_Background_Dpkg.Psappspdlat := True
Perf_Dpkg.Pcengoutprds := Altpln
Perf_Background_Dpkg.Pcpathref := Onpath
Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
6462 6473 Perf_Background_DPkg.Pscurcas := 5.0
6463 6474 Perf_Background_DPkg.Pscurmach := 5.0
6464 6475 Perf_Background_DPkg.Pscurtas := 5.0
6465 6476 Perf_Background_Dpkg.Pcitin.Itinerary := Optimum_Altitude
6466 6477 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
6467 6478 Perf_Background_Dpkg.Pstogwtval := False
6468 6479 Perf_Background_Dpkg.Pstogwt := 50.0
6469 6480 Perf_Background_Dpkg.Pcgwind := Invalid
6470 6481 Perf_Background_Dpkg.Psgw := 0.0
6471 6482 Perf_Dpkg.Gross_Weight.Status := Valid
6472 6483 Perf_Dpkg.Gross_Weight.Data := 150.0
6473 6484 Perf_Integration_DPkg.Pcairbrakes := Fullab
6474 6485 Perf_Background_Dpkg.Pcacconfig := 5
6475 6486 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
6476 6487 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
6477 6488 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
6478 6489 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
6479 6490 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
6480 6491 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
6481 6492 Perf_Background_Dpkg.Psstpclbact := True
6482 6493 Perf_Background_Dpkg.Psstpdesact := True
6483 6494 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
6484 6495 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
6485 6496 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
6486 6497 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
6487 6498 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
6488 6499 Perf_Background_Dpkg.Pcprebcalt.Valid := True
6489 6500 Perf_Background_Dpkg.Pcgmttime.Hour := 1
6490 6501 Perf_Background_Dpkg.Pcgmttime.Minute := 1
6491 6502 Perf_Background_Dpkg.Pcgmttime.Second := 1
6492 6503 Perf_Background_Dpkg.Psinertvs := 5.0
6493 6504 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
6494 6505 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
6495 6506 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
6496 6507 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
6497 6508 Perf_Ads_Dpkg.Pr_Enabled := False
6498 6509 ATC_DISCRETES_PKG:body.Adson_Flag := False
6499 6510 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
6500 6511 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
6501 6512 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
6502 6513 ^Noise_Speed_Val := True
6503 6514 Perf_Background_Dpkg.Trip_Data.FUEL := 0.0
6504 6515 Perf_Background_Dpkg.Trip_Data.TIME := 0.0
6505 6516 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Iienabled := True
```

6506	6517	Perf_Flight_Test_Dpkg.Perf_Repack_Data.Prenabled := True
6507	6518	Perf_Background_Dpkg.Psisadev := 0.0
6508	6519	
6509		~~#sba prf_bkgnd_pkg.get_bk_Data #1267~~
	6520	#sba prf_bkgnd_pkg.get_bk_Data #1274
6510	6521	#go
6511	6522	Perf_Background_Dpkg.Pcmanspd.Casvalid := True
6512	6523	Machmode := True
6513	6524	Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt := 20000.0
6514	6525	CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec = True
6515	6526	#delb/all
6516	6527	#sba Sys_Perf_Interface_Dpkg.Pctriptime #423
6517	6528	#go
6518	6529	Data_Storage.Pctriptime(ACTIVE).FUEL := 1000.0
6519	6530	Data_Storage.Pctriptime(ACTIVE).TIME := 3600.0
6520	6531	
6521		~~#sba prf_bkgnd_pkg.get_bk_Data #1533~~
	6532	#sba prf_bkgnd_pkg.get_bk_Data #1540
6522	6533	#go
6523	6534	Perf_Background_Dpkg.Psisadev = -15.0
6524	6535	
6525	6536	!run_test()
6526	6537	
6527	6538	Perf_Background_Dpkg.Pcmanspd.Casvalid = False
6528	6539	Perf_Background_Dpkg.Trip_Data.FUEL = 1000.0
6529	6540	Perf_Background_Dpkg.Trip_Data.TIME = 3600.0
6530	6541	Perf_Flight_Test_Dpkg.Perf_Repack_Data.Ienabled = False
6531	6542	Perf_Flight_Test_Dpkg.Perf_Repack_Data.Prenabled = False
6532	6543	
6533	6544	---
6534	6545	TESTID: 34
6535	6546	
6536	6547	the descent path shall be retrieved from the descent path object manager via a call to Perf_Ext_Despath.Pgvdespath if
6537	6548	the current itinerary is Temporary Primary Flight Plan Predictions.
6538	6549	
6539	6550	When following conditions are met:
6540	6551	1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
6541	6552	2. the descent speed limit is latched
6542	6553	3. the flight plan is Temporary,
6543	6554	4. the flight phase is descent
6544	6555	then the following shall be done:
6545	6556	i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
6546	6557	ii) If the DES SPD LIM Perf leg is Included, then
6547	6558	If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,

```
 Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
 Optimum Descent CAS is set to the DES SPD LIM speed.

Here verify conditon 3(the flight plan is not Temporary) is not satisfied, Perf_Buffer.Getperfleg procedure will not b
» e called.
PERF_SDD_08158_INT

When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
»  set to False.
1. First Preds After Insert Temporary indication is True or
2. The descent speed limit has not been latched or
3. The temporary flight plan does not exist.

Here verify condition 3(The temporary flight plan does not exist) is satisfied, Psdeslimspdchg is set to False.
PERF_SDD_08159_INT

If the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and the predictions count is equal to one.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT, PERF_SDD_3888_INT, PERF_SDD_08158_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A


```

```
6590  6601 -- INPUTS
6591  6602 Perf_Background_Dpkg.Flight_Plan_Type                    := Perf_Int_Base_Tpkg.Is_Active
6592  6603 Perf_Background_Dpkg.Psairborne                          := False
6593  6604 Perf_Background_Dpkg.Psdeslimspdchg                      := True
6594  6605 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim         := True
6595  6606 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := False
6596  6607 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
6597  6608 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
6598  6609 Perf_Background_Dpkg.Pcactorsec                          := Active
6599  6610 Perf_Background_Dpkg.Pcfltphase                          := Descent
6600  6611 Guid_Spds_Dpkg.Vc3prtlimcas                              := 160.0
6601  6612 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
6602  6613 Perf_Background_Dpkg.Psautolat                           := True
6603  6614 Guid_Ext_Dpkg.Gcxxlatautoc                               := True
6604  6615 Perf_Background_Dpkg.Psappspdlat                         := False
6605  6616 Perf_Background_Dpkg.Pcpredcount(Active)                 := 1
6606  6617 Perf_Dpkg.Psfrstactprd                                   := False
6607  6618 Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
6608  6619 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0
6609  6620
6610  6621 Perf_Background_Dpkg.Pcitin.Flight_Plan                  := Temporary
6611  6622 Perf_Background_Dpkg.Pcitin.Itinerary                    := Prim_Fpln_Preds
6612  6623 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       := False
6613  6624
6614       ~~#sba prf_bkgnd_pkg.get_bk_Data #1267~~
      6625 #sba prf_bkgnd_pkg.get_bk_Data #1274
6615  6626 #go
6616  6627 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec          = True
6617  6628 #delb/all
6618  6629
6619  6630 !run_test()
6620  6631
6621  6632 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  160.0
6622  6633 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       = False
6623  6634 Perf_Background_Dpkg.Psdeslimspdchg                      = False
6624  6635 ---------------------------------------------------------------------------------------------
6625  6636 TESTID: 35
6626  6637
6627  6638 if the current itinerary is Fuel_Plan_Fpln_Preds,and Psgetout set to False, then the descent path shall be
6628  6639 invalidated to cause it to be rebuilt.
6629  6640
6630  6641 When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
           »  set to False.
6631  6642 1. First Preds After Insert Temporary indication is True
```

```
2. The descent speed limit has not been latched
3. The temporary flight plan does not exist.

Here conditon 1,2,3 are not satisfied, Psdeslimspdchg is not set to False.
PERF_SDD_08159_INT

If the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and current working flight plan is Active and the difference between
-- the current prediction sequence counter and starting prediction sequence counter is equal to 2.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT, PERF_SDD_3681_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                    := Perf_Int_Base_Tpkg.Is_Active
Perf_Background_Dpkg.Psairborne                          := False
Perf_Background_Dpkg.Psdeslimspdchg                      := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim         := True
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := True
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
```

```
Guid_Spds_Dpkg.Vc3prtlimcas                              := 170.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Background_Dpkg.Active_Start_Predcount              := 1
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

Perf_Background_Dpkg.Pcitin.Itinerary                    := Fuel_Plan_Fpln_Preds
Perf_Background_Dpkg.Psgetout                            := False
Perf_Despath_Dpkg.Pcdespath.Vgavalid                     := True

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                = 170.0
Perf_Despath_Dpkg.Pcdespath.Vgavalid                     = False
Perf_Background_Dpkg.Psdeslimspdchg                      = True
---------------------------------------------------------------------------------------------
TESTID: 36

if the current itinerary is Primary Flight Plan Predictions for a flight plan other than Active or Temporary,and
Psgetout set to False, then the descent path shall be invalidated to cause it to be rebuilt.

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
 Optimum Descent CAS is set to the DES SPD LIM speed.

Here verify conditon 4(the flight phase is not descent ) is not satisfied, Perf_Buffer.Getperfleg procedure will not b
» e called.
PERF_SDD_08158_INT

When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
»  set to False.
```

```
1. First Preds After Insert Temporary indication is True
2. The descent speed limit has not been latched
3. The temporary flight plan does not exist.

Here verify condition 1(First Preds After Insert Temporary indication is True) is satisfied, Psdeslimspdchg is set to
» False.
PERF_SDD_08159_INT

If the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Approach and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and First Preds After Insert Temporary indication is True.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT, PERF_SDD_3681_INT, PERF_SDD_08158_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                    := Perf_Int_Base_Tpkg.Is_Active
Perf_Background_Dpkg.Psairborne                          := False
Perf_Background_Dpkg.Psdeslimspdchg                      := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim                 := True
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := True
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Approach
Perf_Background_Dpkg.Pcfltphase                          := Approach
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
Perf_Background_Dpkg.Pcactorsec                          := Temporary
Guid_Spds_Dpkg.Vc3prtlimcas                              := 183.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Temporary)              := 3
Perf_Dpkg.Psfrstactprd                                   := True
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := True
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

Perf_Background_Dpkg.Pcitin.Itinerary                    := Prim_Fpln_Preds
Perf_Background_Dpkg.Pcitin.Flight_Plan                  := Secondary
Perf_Background_Dpkg.Psgetout                            := False
Perf_Despath_Dpkg.Pcdespath.Vgavalid                     := True
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       := False
!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                 = 183.0
Perf_Despath_Dpkg.Pcdespath.Vgavalid                      = False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE        = False
Perf_Background_Dpkg.Psdeslimspdchg                       = False
--------------------------------------------------------------------------------------------
TESTID: 37

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or Approach, then the Optimum Descen
» t Mach
shall be set as follows:if the flight phase is Descent, then Optimum Descent Mach is set to current VG Mach target;oth
» erwise,
if Real-Time computed Economy Descent speeds are invalid, then Optimum Descent Mach is set to MMO.

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is not in Auto Lateral mode.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT, PERF_SDD_2276_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach               := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 3.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := False
Perf_Background_Dpkg.Psautolat                           := False
Guid_Ext_Dpkg.Gcxxlatautoc                               := False
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := True
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0
Guid_Spds_Dpkg.Vc3curspds.Mach.Data                      := 3.5
Perf_Database_Dpkg.Psmmo                                 := 1.0

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  3.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach               =  3.5

-------------------------------------------------------------------------------------------
TESTID: 38

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Approach and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- Approach Speeds have been latched.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Approach
Perf_Background_Dpkg.Pcfltphase                          := Approach
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 3.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := False
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := True
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := True
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  3.0

---------------------------------------------------------------------------------------------
TESTID: 39
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
6891  6902 the currently active flight phase is climb, the real time climb speeds are valid for current working flight plan then
6892  6903 Optimum Econ/LRC climb CAS and Mach are set to the real time climb CAS and Mach speeds respectively for the current wo
           » rking flight plan.
6893  6904 PERF_SDD_08226(PERF_SRD_2801,PERF_SRD_23365,PERF_SRD_23455)
6894  6905 the current flight phase is not cruise then
6895  6906 The original step speeds (CAS and Mach) before speed limiting are not be changed.
6896  6907 The flag indicating Predictions are in step not be changed.
6897  6908 The Step CAS and Mach speeds not be changed.
6898  6909 Optimum Econ/LRC Cruise CAS and Mach not be changed.
6899  6910 Flag indicating the speed targets from FG not be changed.
6900  6911  PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
6901  6912
6902  6913
6903  6914 --INPUTS
6904  6915
6905  6916 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase                      := Climb
6906  6917 Perf_Background_Dpkg.Pcactorsec                                        := Active
6907  6918 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Valid := true
6908  6919 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Cas   := 230.0
6909  6920 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Mach  := 0.6
6910  6921 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
6911  6922 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas := 265.0
6912  6923 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach := 0.55
6913  6924 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := True
6914  6925 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas := 288.0
6915  6926 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach := 0.66
6916  6927 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec ) := 100.00
6917  6928 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec ) := 0.12
6918  6929 Perf_Background_Dpkg.Psinstep := False
6919  6930 Perf_Background_Dpkg.Psstepcas := 200.00
6920  6931 Perf_Background_Dpkg.Psstepmach := 0.35
6921  6932 Perf_Background_Dpkg.Psecncrzmach :=200.0
6922  6933 Perf_Background_Dpkg.Psecncrzcas := 0.55
6923  6934 Prf_Bkgnd_Pkg:body.Fgspdsvalid  := True
6924  6935 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True
6925  6936
6926  6937 -- Reset Output
6927  6938 Perf_Background_Dpkg.Pcoptinitspd.Clb.Cas    := 0.0
6928  6939 Perf_Background_Dpkg.Pcoptinitspd.Clb.Mach   := 0.0
6929  6940
6930  6941 --this breakpoint is set to verify the variables for PERF_SDD_09063
6931       ~~#sba prf_bkgnd_pkg.get_bk_Data #1105~~
      6942 #sba prf_bkgnd_pkg.get_bk_Data #1112
6932  6943 #go
```

```
6933  6944 Prf_Bkgnd_Pkg:body.Fgspdsvalid = True
6934  6945
6935  6946 !run_test()
6936  6947
6937  6948 -- OUTPUTS
6938  6949 Perf_Background_Dpkg.Pcoptinitspd.Clb.Cas     = 230.0
6939  6950 Perf_Background_Dpkg.Pcoptinitspd.Clb.Mach    = 0.6
6940  6951 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec ) = 100.00
6941  6952 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec ) = 0.12
6942  6953 Perf_Background_Dpkg.Psinstep = False
6943  6954 Perf_Background_Dpkg.Psstepcas = 200.00
6944  6955 Perf_Background_Dpkg.Psstepmach = 0.35
6945  6956 Perf_Background_Dpkg.Psecncrzmach =200.0
6946  6957 Perf_Background_Dpkg.Psecncrzcas = 0.55
6947  6958
6948  6959 ---------------------------------------------------------------------------------------
6949  6960 TESTID: 40
6950  6961 the currently active flight phase is climb,the real time climb speeds are not valid for current working flight plan th
           » en
6951  6962 Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.
6952  6963 PERF_SDD_08226(PERF_SRD_2801,PERF_SRD_23365,PERF_SRD_23455)
6953  6964
6954  6965
6955  6966 --INPUTS
6956  6967 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase                       := climb
6957  6968 Perf_Background_Dpkg.Pcactorsec                                         := Active
6958  6969 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(climb).Valid := false
6959  6970 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid         := false
6960  6971 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact                        := false
6961  6972 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact                        := false
6962  6973
6963  6974 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(climb).Mach  := 0.8
6964  6975 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(climb).Cas   := 330.0
6965  6976
6966  6977 -- Reset Output
6967  6978 Perf_Background_Dpkg.Psecncrzmach            := 0.0
6968  6979 Perf_Background_Dpkg.Psecncrzcas             := 0.0
6969  6980 Prf_Bkgnd_Pkg:body.Fgspdsvalid  := True
6970  6981 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True
6971  6982
6972  6983 --this breakpoint is set to verify the variables for PERF_SDD_08226
6973       ~~#sba prf_bkgnd_pkg.get_bk_Data #1062~~
      6984 #sba prf_bkgnd_pkg.get_bk_Data #1069
6974  6985 #go
```

```
6975  6986 Prf_Bkgnd_Pkg:body.Fgspdsvalid = false
6976  6987
6977  6988 !run_test()
6978  6989
6979  6990 -- OUTPUTS
6980  6991 Perf_Background_Dpkg.Psecncrzmach             = 0.0
6981  6992 Perf_Background_Dpkg.Psecncrzcas              = 0.0
6982  6993
6983  6994 -------------------------------------------------------------------------------------------------------------------------
           » -----------
6984  6995 TESTID: 41
6985  6996
6986  6997     If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
6987  6998    - Perf hold flag record (Pcholdflags) is copied from guidance
6988  6999    - Descent limit latch record (Pcdeslimlat) is copied from guidance.
6989  7000    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
           » h.
6990  7001    - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
           »  considers
6991  7002      the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
6992  7003    - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
           »  HM if no
6993  7004      deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
           » lear the HM
6994  7005      leg deleted while in decel to HM flag (Pshmdeleted).
6995  7006    - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
           » d, and the
6996  7007      HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
           » t is within
6997  7008      the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
6998  7009    - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
           » l to HM,
6999  7010      then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
7000  7011     PERF_SDD_4794_INT
7001  7012     This test case verify:
7002  7013     (1)HM leg deleted while in decel to HM flag remain False (Pshmdeleted)  (F,F,F)
7003  7014
7004  7015     This case verfify When mach target and the fcu mach selected mode are valid, the speed target tag is set to indica
           » te Mach
7005  7016     and FCU speed is set to the value of selected Mach.
7006  7017     PERF_SDD_4779_INT
7007  7018
7008  7019     Also verify when the current itinerary is Fuel_Plan_Fpln_Preds, but the A/C is in not Takeoff & Climb.
7009  7020     so, Climb Auto Derate will not be processed.
```

```
    PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)

    Perf_Background_Dpkg.Use_Clb_Autodrt is not true, so Perf_Background_Dpkg.Climb_Autodrt.Is_Valid is set to false.
    PERF_SDD_07919 (PERF_SRD_12641)

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_4794_INT, PERF_SDD_4779_INT, PERF_SDD_4780_INT, PERF_SDD_07956, PERF_SDD_
» 07919,
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                      := Copy_From_Active
Perf_Background_Dpkg.Pcactorsec                            := Temporary
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive         := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel          := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn        := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel        := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv        := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval        := True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm      := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim           := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim          := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel         := False
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Approach --Perf_Background_Dpkg.Pcfltphase
Perf_Dpkg.Pshmdeleted                                      := False

--Io_Fcu_Dpkg.Selected_Mach.Data
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Mach    := 0.68
--Io_Fcu_Dpkg.Selected_Mach.Is_Valid
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Mach  := True
--Io_Fg_Fm_Internal_Dpkg.Mach_Selection_Mode_Selected.Data (Machmode)
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected :=
» True
--Io_Fcu_Dpkg.Selected_Airspeed.Data
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Airspeed  := 320.0
--Io_Fcu_Dpkg.Selected_Airspeed.Is_Valid
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Airspeed := False
Perf_Background_Dpkg.Pcitin.Itinerary               := Fuel_Plan_Fpln_Preds
CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 20000
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat:=79.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas := 200.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach := 0.5
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas := 600.0
Guid_Spds_Dpkg.Vc3curspds.Fltphase := Approach

-- Reset Outputs
Perf_Background_Dpkg.Pcholdflags.Hmactive           := False
Perf_Background_Dpkg.Pcholdflags.Hmdecel            := True
Perf_Background_Dpkg.Pcholdflags.Manhmwarn          := False
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel          := False
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv          := False
Perf_Background_Dpkg.Pcholdflags.Hmdistval          := False
Perf_Background_Dpkg.Pcholdflags.Consider_Hm        := True
Perf_Background_Dpkg.Pcspdtgttag                    := Fmcs_Base_Types.Cas
Perf_Background_Dpkg.Psfcuspd                       := 0.0
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid         := True
Perf_Background_Dpkg.Use_Clb_Autodrt                := True
Perf_Background_Dpkg.Pshmdecel                      := True

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Pcholdflags.Hmactive    = True
Perf_Background_Dpkg.Pcholdflags.Hmdecel     = False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn   = True
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel   = True
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv   = True
Perf_Background_Dpkg.Pcholdflags.Hmdistval   = True
Perf_Background_Dpkg.Pcholdflags.Consider_Hm = False
Perf_Dpkg.Pshmdeleted                        = False   --Remain false
Perf_Background_Dpkg.Pcspdtgttag             = Fmcs_Base_Types.Mach
Perf_Background_Dpkg.Psfcuspd                = 0.68
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid  = False
Perf_Background_Dpkg.Use_Clb_Autodrt         = False
Perf_Background_Dpkg.Pshmdecel               = false

---------------------------------------------------------------------------------------------
TESTID: 42

    If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
```

```
7095  7106     - Perf hold flag record (Pcholdflags) is copied from guidance
7096  7107     - Descent limit latch record (Pcdeslimlat) is copied from guidance.
7097  7108     - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
            » h.
7098  7109     - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
            »  considers
7099  7110       the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
7100  7111     - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
            »  HM if no
7101  7112       deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
            » lear the HM
7102  7113       leg deleted while in decel to HM flag (Pshmdeleted).
7103  7114     - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
            » d, and the
7104  7115       HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
            » t is within
7105  7116       the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
7106  7117     - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
            » l to HM,
7107  7118       then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
7108  7119       PERF_SDD_4794_INT
7109  7120
7110  7121     This case verify when CAS target is valid, and fcu mach selected mode is invalid(cas selected mode is valid), the
            » speed target
7111  7122     tag is set to indicate CAS and fcu speed is set to the value of selected CAS.
7112  7123     PERF_SDD_4780_INT
7113  7124
7114  7125     This test case verify
7115  7126     (1)HM leg deleted while in decel to HM flag remain False (Pshmdeleted)  (T,T,F)
7116  7127     (2)Flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to True (T,F)
7117  7128     (3)Flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
            » e (T,T,F)
7118  7129
7119  7130     When the FPA mode active and the target retrieved from IO are valid,
7120  7131     then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
7121  7132     The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
            »  retrieved
7122  7133     from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
            » rom ft/min
7123  7134     to ft/sec. The flag indicating the vertical speed mode active is set to True.
7124  7135     PERF_SDD_07504_INT
7125  7136     --In this test case,Fpa_Target.Valid is false and Vs_Target.Valid is false
7126  7137     REQUIREMENTS UNDER EVALUATION : PERF_SDD_4794_INT, PERF_SDD_4779_INT, PERF_SDD_4780_INT,PERF_SDD_07504_INT
7127  7138     SUPPORTING REQUIREMENTS : N/A
```

```
7128  7139
7129  7140
7130  7141 -- INPUTS
7131  7142 Perf_Background_Dpkg.Flight_Plan_Type                      := Copy_From_Active
7132  7143 Perf_Background_Dpkg.Pcactorsec                            := Temporary
7133  7144 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive         := False
7134  7145 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel          := True
7135  7146 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn        := False
7136  7147 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel        := False
7137  7148 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv        := False
7138  7149 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval        := False
7139  7150 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm      := True
7140  7151 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim           := False
7141  7152 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim          := False
7142  7153 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel         := False
7143  7154 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Approach --Perf_Background_Dpkg.Pcfltphase
7144  7155 Perf_Dpkg.Pshmdeleted                                      := False
7145  7156 --Io_Fcu_Dpkg.Selected_Mach.Data
7146  7157 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Mach       := 0.58
7147  7158 --Io_Fcu_Dpkg.Selected_Mach.Is_Valid
7148  7159 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Mach  := True
7149  7160 --Io_Fg_Fm_Internal_Dpkg.Mach_Selection_Mode_Selected.Data (Machmode)
7150  7161 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected  :=
           »  False
7151  7162 --Io_Fcu_Dpkg.Selected_Airspeed.Data
7152  7163 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Airspeed  := 320.0
7153  7164 --Io_Fcu_Dpkg.Selected_Airspeed.Is_Valid
7154  7165 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Airspeed  := True
7155  7166
7156  7167 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3               := True
7157  7168 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
           » := true
7158  7169 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target         := false
7159  7170 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target       := 57.3066
7160  7171 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active :=
           » true
7161  7172 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target  := false
7162  7173 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target  := 60.0
7163  7174 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
7164  7175 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
7165  7176 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
7166  7177 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
7167  7178 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 20000
7168  7179 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat:=79.0
```

```
7169  7180  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas := 60.0
7170  7181  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach := 1.5
7171  7182  CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true
7172  7183  
7173  7184  -- Reset Outputs
7174  7185  Perf_Background_Dpkg.Pcholdflags.Hmactive           := True
7175  7186  Perf_Background_Dpkg.Pcholdflags.Hmdecel            := False
7176  7187  Perf_Background_Dpkg.Pcholdflags.Manhmwarn          := True
7177  7188  Perf_Background_Dpkg.Pcholdflags.Hxpxdecel          := True
7178  7189  Perf_Background_Dpkg.Pcholdflags.Hxpxactiv          := True
7179  7190  Perf_Background_Dpkg.Pcholdflags.Hmdistval          := True
7180  7191  Perf_Background_Dpkg.Pcholdflags.Consider_Hm        := False
7181  7192  Perf_Background_Dpkg.Pshmdecel                      := False
7182  7193  Perf_Background_Dpkg.Psconsider_Hm                  := True
7183  7194  Perf_Background_Dpkg.Pcspdtgttag                    := Fmcs_Base_Types.Mach
7184  7195  Perf_Background_Dpkg.Psfcuspd                       := 0.0
7185  7196  Perf_Background_Dpkg.Psfpatgt                       := 0.0
7186  7197  Perf_Background_Dpkg.Psfpaact                       := false
7187  7198  Perf_Integration_Dpkg.Psvstgt                       := 0.0
7188  7199  Perf_Background_Dpkg.Psvsact                        := false
7189  7200  
7190  7201  !run_test()
7191  7202  
7192  7203  -- OUTPUTS
7193  7204  Perf_Background_Dpkg.Pcholdflags.Hmactive    = False
7194  7205  Perf_Background_Dpkg.Pcholdflags.Hmdecel     = True
7195  7206  Perf_Background_Dpkg.Pcholdflags.Manhmwarn   = False
7196  7207  Perf_Background_Dpkg.Pcholdflags.Hxpxdecel   = False
7197  7208  Perf_Background_Dpkg.Pcholdflags.Hxpxactiv   = False
7198  7209  Perf_Background_Dpkg.Pcholdflags.Hmdistval   = False
7199  7210  Perf_Background_Dpkg.Pcholdflags.Consider_Hm = True
7200  7211  Perf_Dpkg.Pshmdeleted                        = False   --Remain false
7201  7212  Perf_Background_Dpkg.Pshmdecel               = True
7202  7213  Perf_Background_Dpkg.Psconsider_Hm           = False
7203  7214  Perf_Background_Dpkg.Pcspdtgttag             = CAS
7204  7215  Perf_Background_Dpkg.Psfcuspd                = 320.0
7205  7216  Perf_Background_Dpkg.Psfpatgt                /= 1.0
7206  7217  Perf_Background_Dpkg.Psfpaact                /= true
7207  7218  Perf_Integration_Dpkg.Psvstgt                /= 1.0
7208  7219  Perf_Background_Dpkg.Psvsact                 /= true
7209  7220  ---------------------------------------------------------------------------------------------
7210  7221  TESTID: 43
7211  7222  
7212  7223      If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
   - Perf hold flag record (Pcholdflags) is copied from guidance
   - Descent limit latch record (Pcdeslimlat) is copied from guidance.
   - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
» h.
   - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
»  considers
     the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
   - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
»  HM if no
     deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
» lear the HM
     leg deleted while in decel to HM flag (Pshmdeleted).
   - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
» d, and the
     HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
» t is within
     the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
   - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
» l to HM,
     then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
    PERF_SDD_4794_INT
    This case verify when both PERF_SDD_4779_INT, PERF_SDD_4780_INT are not satisfied.

    This test case verify
    (1)Flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to True
»  (T,F,F)

    When the FPA mode active and the target retrieved from IO are valid,
    then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
    The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
»  retrieved
    from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
» rom ft/min
    to ft/sec. The flag indicating the vertical speed mode active is set to True.
    PERF_SDD_07504_INT
    --In this test case,Fpa_Target.Valid is false and Vspd_Mode_Active.Data is false
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_4794_INT, PERF_SDD_4779_INT, PERF_SDD_4780_INT,PERF_SDD_07504_INT
    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                      := Copy_From_Active
Perf_Background_Dpkg.Pcactorsec                            := Temporary
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive         := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel          := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn        := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel        := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv        := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval        := False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm      := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim           := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim          := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel         := False
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Approach --Perf_Background_Dpkg.Pcfltphase
Perf_Dpkg.Pshmdeleted                                      := False
--Io_Fcu_Dpkg.Selected_Mach.Data
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Mach        := 0.58
--Io_Fcu_Dpkg.Selected_Mach.Is_Valid
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Mach  := False
--Io_Fg_Fm_Internal_Dpkg.Mach_Selection_Mode_Selected.Data (Machmode)
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected :=
» True
--Io_Fcu_Dpkg.Selected_Airspeed.Data
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Airspeed  := 320.0
--Io_Fcu_Dpkg.Selected_Airspeed.Is_Valid
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Airspeed := True

Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3               := True
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
» := true
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target        := false
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target      := 57.3066
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active :=
» false
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target  := true
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target  := 451.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := 20000
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat:=79.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas := 451.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach := 1.0
CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status :=true

-- Reset Outputs
Perf_Background_Dpkg.Pcholdflags.Hmactive           := True
Perf_Background_Dpkg.Pcholdflags.Hmdecel            := True
Perf_Background_Dpkg.Pcholdflags.Manhmwarn          := True
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel          := True
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv          := True
Perf_Background_Dpkg.Pcholdflags.Hmdistval          := True
Perf_Background_Dpkg.Pcholdflags.Consider_Hm        := False
Perf_Background_Dpkg.Psconsider_Hm                  := False
Perf_Background_Dpkg.Pcspdtgttag                    := Fmcs_Base_Types.Cas
Perf_Background_Dpkg.Psfcuspd                       := 0.0
Perf_Background_Dpkg.Psfpatgt                       := 0.0
Perf_Background_Dpkg.Psfpaact                       := false
Perf_Integration_Dpkg.Psvstgt                       := 0.0
Perf_Background_Dpkg.Psvsact                        := false
!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Pcholdflags.Hmactive    = False
Perf_Background_Dpkg.Pcholdflags.Hmdecel     = False
Perf_Background_Dpkg.Pcholdflags.Manhmwarn   = False
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel   = False
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv   = False
Perf_Background_Dpkg.Pcholdflags.Hmdistval   = False
Perf_Background_Dpkg.Pcholdflags.Consider_Hm = True
Perf_Dpkg.Pshmdeleted                        = False   --Remain false
Perf_Background_Dpkg.Psconsider_Hm           = True
Perf_Background_Dpkg.Pcspdtgttag             = CAS  --Remain cas
Perf_Background_Dpkg.Psfcuspd                = 0.0  --Remain 0.0
Perf_Background_Dpkg.Psfpatgt                /= 1.0
Perf_Background_Dpkg.Psfpaact                /= true
Perf_Integration_Dpkg.Psvstgt                /= 7.5
Perf_Background_Dpkg.Psvsact                 /= true
----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 44
TC 44 verifies:
when Itinerary is Fuel_Plan_Fpln_Preds and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Temporary, so, the Active F
» light plan
is passed as input to the function.
also, when satisfy the following condition, Perf_Background_Dpkg.Use_Clb_Autodrt flag is set to true.
1) OPC Auto-Derate climb option activated set to True
2) Pilot selected Climb mode is Auto-Derate
3) Cruise altitude validity flag is set to True
4) Take-off gross weight validity flag is set to True
```

```
PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
When Perf_Background_Dpkg.Use_Clb_Autodrt flag is set to true, the procedure Perf_Int_Utils.Climb_Autodrt procedure
shall be called to compute the auto-derate outputs. Also, Perf_Background_Dpkg.Climb_Autodrt.Is_Valid is set to true.
PERF_SDD_07919 (PERF_SRD_12641)
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                      := Is_Active
Perf_Background_Dpkg.Pcitin.Itinerary                      := Fuel_Plan_Fpln_Preds
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Takeoff   --Perf_Background_Dpkg.Pcfltphase
Perf_Background_Dpkg.Pcactorsec                            := Temporary
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode    := Cdk_Entry_Tpkg.Auto_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode := Cdk_Entry_Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable  := True
Perf_Background_Dpkg.Pscrzalt.Valid                        := True
Perf_Dpkg.takeoff_gwt.valid                                := True
Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Woendalt               := 3500.0
Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Wos                    := 1.5
Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Dtflex                 := 2.0

-- Reset Outputs
Perf_Background_Dpkg.Use_Clb_Autodrt                       := False
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                := False
Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_End_Alt        := 0.0
Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_Slope          := 0.0
Perf_Background_Dpkg.Climb_Autodrt.Delta_T_Flex            := 0.0

#define Call_Auto_Derated_Climb_Mode   := false
#sba Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode after_elab begin
#define Call_Auto_Derated_Climb_Mode   := True
#go
#end

#define Call_Climb_Autodrt   := false
#sba Prf_Int_Utils.Climb_Autodrt after_elab begin
#define Call_Climb_Autodrt   := True
#go
#end

```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Use_Clb_Autodrt                        = True
Call_Auto_Derated_Climb_Mode                                = True
Call_Climb_Autodrt                                          = True
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                 = True
Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_End_Alt         = 3500.0
Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_Slope           = 1.5
Perf_Background_Dpkg.Climb_Autodrt.Delta_T_Flex             = 2.0
----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 45
TC 45 verifies:
when Itinerary is Current_Mode_Hi_Pri and the A/C is in Climb, pilot selected climb mode is obtained by calling
the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Secondary, so, the
current working flight plan is passed as input to the function.
also, In this case, condition (2) is not satisfied, Clb_Autodrt_mode is set to Cdk_Entry_Tpkg.Clb.
so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.

1) OPC Auto-Derate climb option activated set to True
2) Pilot selected Climb mode is Auto-Derate
3) Cruise altitude validity flag is set to True
4) Take-off gross weight validity flag is set to True
5) The A/C has not sequenced the initial TOC for Active Flight plan
PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
Perf_Background_Dpkg.Use_Clb_Autodrt flag is not true, so Perf_Int_Utils.Climb_Autodrt will not be called.
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid is set to false.
PERF_SDD_07919 (PERF_SRD_12641)
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                      := Is_Active
Perf_Background_Dpkg.Pcitin.Itinerary                      := Current_Mode_Hi_Pri
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Climb   --Perf_Background_Dpkg.Pcfltphase
Perf_Background_Dpkg.Pcactorsec                            := Secondary
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode    := Cdk_Entry_Tpkg.Auto_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Secondary ).Autoderated_Climb_Mode := Cdk_Entry_Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable  := True
```

```
7415  7426 Perf_Background_Dpkg.Pscrzalt.Valid                        := True
7416  7427 Perf_Dpkg.takeoff_gwt.valid                                := True
7417  7428 
7418  7429 -- Reset Outputs
7419  7430 Perf_Background_Dpkg.Use_Clb_Autodrt                       := False
7420  7431 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                := True
7421  7432 #define Call_Auto_Derated_Climb_Mode   := false
7422  7433 #sba Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode after_elab begin
7423  7434 #define Call_Auto_Derated_Climb_Mode   := True
7424  7435 #go
7425  7436 #end
7426  7437 
7427  7438 #define Call_Climb_Autodrt   := false
7428  7439 #sba Prf_Int_Utils.Climb_Autodrt after_elab begin
7429  7440 #define Call_Climb_Autodrt   := True
7430  7441 #go
7431  7442 #end
7432  7443 
7433  7444 !run_test()
7434  7445 
7435  7446 -- OUTPUTS
7436  7447 Perf_Background_Dpkg.Use_Clb_Autodrt                        = False
7437  7448 Call_Auto_Derated_Climb_Mode                                = True
7438  7449 Call_Climb_Autodrt                                          = False
7439  7450 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                 = False
7440  7451 ----------------------------------------------------------------------------------------------------------------------
           » --
7441  7452 TESTID: 46
7442  7453 TC 46 verifies:
7443  7454 when Itinerary is Prim_Fpln_Preds and the A/C is in Climb, pilot selected climb mode is obtained by calling
7444  7455 the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Temporary, so, the Active F
           » light plan
7445  7456 is passed as input to the function.
7446  7457 also, In this case, condition (1) is not satisfied, Auto_Derate_Climb_Enable is set to False.
7447  7458 so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.
7448  7459 
7449  7460 1) OPC Auto-Derate climb option activated set to True
7450  7461 2) Pilot selected Climb mode is Auto-Derate
7451  7462 3) Cruise altitude validity flag is set to True
7452  7463 4) Take-off gross weight validity flag is set to True
7453  7464 5) The A/C has not sequenced the initial TOC for Active Flight plan
7454  7465 PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
7455  7466                    PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
7456  7467 Perf_Background_Dpkg.Use_Clb_Autodrt flag is not true, so Perf_Int_Utils.Climb_Autodrt will not be called.
```

```
 7457  7468 PERF_SDD_07919 (PERF_SRD_12641)
 7458  7469     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
 7459  7470     SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
            » 70_INT,
 7460  7471                               PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT
 7461  7472 
 7462  7473 
 7463  7474 -- INPUTS
 7464  7475 Perf_Background_Dpkg.Flight_Plan_Type                      := Is_Active
 7465  7476 Perf_Background_Dpkg.Pcitin.Itinerary                      := Prim_Fpln_Preds
 7466  7477 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Climb   --Perf_Background_Dpkg.Pcfltphase
 7467  7478 Perf_Background_Dpkg.Pcactorsec                             := Temporary
 7468  7479 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode    := Cdk_Entry_Tpkg.Auto_Derate
 7469  7480 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode := Cdk_Entry_Tpkg.Clb
 7470  7481 Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable  := False
 7471  7482 Perf_Background_Dpkg.Pscrzalt.Valid                        := True
 7472  7483 Perf_Dpkg.takeoff_gwt.valid                                := True
 7473  7484 
 7474  7485 -- Reset Outputs
 7475  7486 Perf_Background_Dpkg.Use_Clb_Autodrt                       := False
 7476  7487 
 7477  7488 #define Call_Auto_Derated_Climb_Mode   := false
 7478  7489 #sba Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode after_elab begin
 7479  7490 #define Call_Auto_Derated_Climb_Mode   := True
 7480  7491 #go
 7481  7492 #end
 7482  7493 
 7483  7494 #define Call_Climb_Autodrt   := false
 7484  7495 #sba Prf_Int_Utils.Climb_Autodrt after_elab begin
 7485  7496 #define Call_Climb_Autodrt   := True
 7486  7497 #go
 7487  7498 #end
 7488  7499 
 7489  7500 !run_test()
 7490  7501 
 7491  7502 -- OUTPUTS
 7492  7503 Perf_Background_Dpkg.Use_Clb_Autodrt                        = False
 7493  7504 Call_Auto_Derated_Climb_Mode                                = True
 7494  7505 Call_Climb_Autodrt                                          = False
 7495  7506 ----------------------------------------------------------------------------------------------------------------------
            » --
 7496  7507 TESTID: 47
 7497  7508 TC 47 verifies:
 7498  7509 when Itinerary is Current_Mode_Preds and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Active, so, the Active Flight plan
is passed as input to the function.
also, In this case, condition (3) is not satisfied, Perf_Background_Dpkg.Pscrzalt.Valid is set to False.
so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.

1) OPC Auto-Derate climb option activated set to True
2) Pilot selected Climb mode is Auto-Derate
3) Cruise altitude validity flag is set to True
4) Take-off gross weight validity flag is set to True
5) The A/C has not sequenced the initial TOC for Active Flight plan
PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
Perf_Background_Dpkg.Use_Clb_Autodrt flag is not true, so Perf_Int_Utils.Climb_Autodrt will not be called.
PERF_SDD_07919 (PERF_SRD_12641)
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                      := Is_Active
Perf_Background_Dpkg.Pcitin.Itinerary                      := Current_Mode_Preds
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Takeoff   --Perf_Background_Dpkg.Pcfltphase
Perf_Background_Dpkg.Pcactorsec                            := Active
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode    := Cdk_Entry_Tpkg.Auto_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode := Cdk_Entry_Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable  := True

Perf_Dpkg.takeoff_gwt.valid                                := True

-- Reset Outputs
Perf_Background_Dpkg.Use_Clb_Autodrt                       := False

#define Call_Auto_Derated_Climb_Mode   := false
#sba Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode after_elab begin
#define Call_Auto_Derated_Climb_Mode   := True
#Perf_Background_Dpkg.Pscrzalt.Valid   := False
#go
#end

#define Call_Climb_Autodrt   := false
#sba Prf_Int_Utils.Climb_Autodrt after_elab begin
```

```
#define Call_Climb_Autodrt   := True
#go
#end

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Use_Clb_Autodrt                        = False
Call_Auto_Derated_Climb_Mode                                = True
Call_Climb_Autodrt                                          = False
----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 48
TC 48 verifies:
when Itinerary is Fuel_Plan_Fpln_Preds and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Active, so, the Active Flig
» ht plan
is passed as input to the function.
also, In this case, condition (4) is not satisfied, Perf_Dpkg.Takeoff_Gwt.Valid is set to False.
so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.

1) OPC Auto-Derate climb option activated set to True
2) Pilot selected Climb mode is Auto-Derate
3) Cruise altitude validity flag is set to True
4) Take-off gross weight validity flag is set to True
5) The A/C has not sequenced the initial TOC for Active Flight plan
PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
Perf_Background_Dpkg.Use_Clb_Autodrt flag is not true, so Perf_Int_Utils.Climb_Autodrt will not be called.
PERF_SDD_07919 (PERF_SRD_12641)
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                      := Is_Active
Perf_Background_Dpkg.Pcitin.Itinerary                      := Fuel_Plan_Fpln_Preds
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Takeoff   --Perf_Background_Dpkg.Pcfltphase
Perf_Background_Dpkg.Pcactorsec                            := Active
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode    := Cdk_Entry_Tpkg.Auto_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode := Cdk_Entry_Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable  := True
```

```
Perf_Background_Dpkg.Pscrzalt.Valid                        := True
Perf_Dpkg.takeoff_gwt.valid                                := False

-- Reset Outputs
Perf_Background_Dpkg.Use_Clb_Autodrt                       := False

#define Call_Auto_Derated_Climb_Mode   := false
#sba Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode after_elab begin
#define Call_Auto_Derated_Climb_Mode   := True
#go
#end

#define Call_Climb_Autodrt   := false
#sba Prf_Int_Utils.Climb_Autodrt after_elab begin
#define Call_Climb_Autodrt   := True
#go
#end

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Use_Clb_Autodrt                        = False
Call_Auto_Derated_Climb_Mode                                = True
Call_Climb_Autodrt                                          = False
----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 49
TC 49 verifies:
when Itinerary is Current_Mode_Hi_Pri and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Active, so, the Active Flig
» ht plan
is passed as input to the function. Also, In this case, the following conditions are satisfied
(especially, the A/C has not sequenced the initial TOC for Active Flight plan )
so, Perf_Background_Dpkg.Use_Clb_Autodrt will be set to true.

1) OPC Auto-Derate climb option activated set to True
2) Pilot selected Climb mode is Auto-Derate
3) Cruise altitude validity flag is set to True
4) Take-off gross weight validity flag is set to True
5) The A/C has not sequenced the initial TOC for Active Flight plan
PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
Perf_Background_Dpkg.Use_Clb_Autodrt flag is set to true, so Perf_Int_Utils.Climb_Autodrt
will be called to compute the auto-derate outputs.
```

```
7624  7635 PERF_SDD_07919 (PERF_SRD_12641)
7625  7636     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
7626  7637     SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
           » 70_INT,
7627  7638                               PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT
7628  7639 
7629  7640 
7630  7641 -- INPUTS
7631  7642 Perf_Background_Dpkg.Flight_Plan_Type                      := Is_Active
7632  7643 Perf_Background_Dpkg.Pcitin.Itinerary                      := Current_Mode_Hi_Pri
7633  7644 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Takeoff   --Perf_Background_Dpkg.Pcfltphase
7634  7645 Perf_Background_Dpkg.Pcactorsec                             := Active
7635  7646 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode    := Cdk_Entry_Tpkg.Auto_Derate
7636  7647 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode := Cdk_Entry_Tpkg.Clb
7637  7648 Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable  := True
7638  7649 Perf_Background_Dpkg.Pscrzalt.Valid                        := True
7639  7650 Perf_Dpkg.takeoff_gwt.valid                                := True
7640  7651 Perf_Background_Dpkg.Psseqtoc                              := False
7641  7652 
7642  7653 -- Reset Outputs
7643  7654 Perf_Background_Dpkg.Use_Clb_Autodrt                       := False
7644  7655 
7645  7656 #define Call_Auto_Derated_Climb_Mode   := false
7646  7657 #sba Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode after_elab begin
7647  7658 #define Call_Auto_Derated_Climb_Mode   := True
7648  7659 #go
7649  7660 #end
7650  7661 
7651  7662 #define Call_Climb_Autodrt   := false
7652  7663 #sba Prf_Int_Utils.Climb_Autodrt after_elab begin
7653  7664 #define Call_Climb_Autodrt   := True
7654  7665 #go
7655  7666 #end
7656  7667 
7657  7668 !run_test()
7658  7669 
7659  7670 -- OUTPUTS
7660  7671 Perf_Background_Dpkg.Use_Clb_Autodrt                        = True
7661  7672 Call_Auto_Derated_Climb_Mode                                = True
7662  7673 Call_Climb_Autodrt                                          = True
7663  7674 ----------------------------------------------------------------------------------------------------------------------
           » --
7664  7675 TESTID: 50
7665  7676 TC 50 verifies:
```

```
when Itinerary is Prim_Fpln_Preds and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Active, so, the Active Flig
» ht plan
is passed as input to the function.
also, In this case, condition (5) is not satisfied, The A/C has sequenced the initial TOC for Active Flight plan
(Perf_Background_Dpkg.Psseqtoc is true)
so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.

1) OPC Auto-Derate climb option activated set to True
2) Pilot selected Climb mode is Auto-Derate
3) Cruise altitude validity flag is set to True
4) Take-off gross weight validity flag is set to True
5) The A/C has not sequenced the initial TOC for Active Flight plan
PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
Perf_Background_Dpkg.Use_Clb_Autodrt flag is not set to true, so Perf_Int_Utils.Climb_Autodrt
will not be called to compute the auto-derate outputs. Perf_Background_Dpkg.Climb_Autodrt.Is_Valid is set to false.
PERF_SDD_07919 (PERF_SRD_12641)
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                      := Is_Active
Perf_Background_Dpkg.Pcitin.Itinerary                      := Prim_Fpln_Preds
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Takeoff   --Perf_Background_Dpkg.Pcfltphase
Perf_Background_Dpkg.Pcactorsec                            := Active
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode    := Cdk_Entry_Tpkg.Auto_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode := Cdk_Entry_Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable  := True
Perf_Background_Dpkg.Pscrzalt.Valid                        := True
Perf_Dpkg.takeoff_gwt.valid                                := True
Perf_Background_Dpkg.Psseqtoc                              := True

-- Reset Outputs
Perf_Background_Dpkg.Use_Clb_Autodrt                       := True
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                := True

#define Call_Auto_Derated_Climb_Mode   := false
#sba Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode after_elab begin
#define Call_Auto_Derated_Climb_Mode   := True
#go
```

```
#end

#define Call_Climb_Autodrt   := false
#sba Prf_Int_Utils.Climb_Autodrt after_elab begin
#define Call_Climb_Autodrt   := True
#go
#end

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Use_Clb_Autodrt                        = False
Call_Auto_Derated_Climb_Mode                                = True
Call_Climb_Autodrt                                          = False
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                 = False
----------------------------------------------------------------------------------------------------------------------
» --

TESTID: 51
TC 51 verifies when current itinerary is Fuel_Plan_Stage2, and the A/C is in Takeoff, FM will not Compute Climb Auto D
» erate.
Perf_Background_Dpkg.Use_Clb_Autodrt flag is not set to true, so Perf_Int_Utils.Climb_Autodrt
will not be called to compute the auto-derate outputs.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                      := Is_Active
Perf_Background_Dpkg.Pcitin.Itinerary                      := Fuel_Plan_Stage2
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase          := Takeoff   --Perf_Background_Dpkg.Pcfltphase
Perf_Background_Dpkg.Pcactorsec                            := Active
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode    := Cdk_Entry_Tpkg.Auto_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode := Cdk_Entry_Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable  := True
Perf_Background_Dpkg.Pscrzalt.Valid                        := True
Perf_Dpkg.takeoff_gwt.valid                                := True
Perf_Background_Dpkg.Psseqtoc                              := True

-- Reset Outputs
Perf_Background_Dpkg.Use_Clb_Autodrt                       := True
```

```
7749  7760
7750  7761 #define Call_Auto_Derated_Climb_Mode   := false
7751  7762 #sba Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode after_elab begin
7752  7763 #define Call_Auto_Derated_Climb_Mode   := True
7753  7764 #go
7754  7765 #end
7755  7766
7756  7767 #define Call_Climb_Autodrt   := false
7757  7768 #sba Prf_Int_Utils.Climb_Autodrt after_elab begin
7758  7769 #define Call_Climb_Autodrt   := True
7759  7770 #go
7760  7771 #end
7761  7772
7762  7773 !run_test()
7763  7774
7764  7775 -- OUTPUTS
7765  7776 Perf_Background_Dpkg.Use_Clb_Autodrt                        = False
7766  7777 Call_Auto_Derated_Climb_Mode                                = False
7767  7778 Call_Climb_Autodrt                                          = False
7768  7779 --------------------------------------------------------------------------------------------------------------------
           » --
7769  7780 TESTID: 52
7770  7781
7771  7782     And if the VG CAS is less than V2+10 and the flight phase is less than or equal to climb then VG CAS is set to V2+
           » 10 speed.
7772  7783     If the previous non-envelope-limited target speed is not set to current VG MACH then previous non-envelope-limited
           »  target speed
7773  7784     shall be set to the current VG CAS target and the previous CAS/Mach speed indicator is set to indicate CAS speed t
           » ype.
7774  7785     Here set VG CAS is large than V2+10 and flight phase is Preflight, previous CAS/Mach speed indicator is CAS.
7775  7786     PERF_SDD_3053_INT
7776  7787
7777  7788
7778  7789 -- INPUTS
7779  7790 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
7780  7791 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
7781  7792 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
7782  7793 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
7783  7794 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
7784  7795 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid := True
7785  7796 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data := True
7786  7797 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data  := True
7787  7798 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data  := True
7788  7799 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
7789  7800 Perf_Dpkg.Min_Gwt := 100.0
7790  7801 Perf_Dpkg.Max_Gwt := 400.0
7791  7802 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
7792  7803 Perf_Background_Dpkg.Psignorehm := True
7793  7804 Perf_Background_Dpkg.Pcfltphase := Preflight
7794  7805 Perf_Background_Dpkg.Ats_Enable := True
7795  7806 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Preflight
7796  7807 Perf_Background_Dpkg.Psacalt := 10000.0
7797  7808 Perf_Database_Dpkg.Psmmo := 0.45
7798  7809 Perf_Background_Dpkg.Pszfw := 300.0
7799  7810 Perf_Background_Dpkg.Psblockfuel := 50.0
7800  7811 Perf_Background_Dpkg.Pstaxifuel := 25.0
7801  7812 Perf_Background_Dpkg.Psairborne := True
7802  7813 Perf_Background_Dpkg.Psautolat := False
7803  7814 Guid_Ext_Dpkg.Gcxxlatautoc := False
7804  7815 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
7805  7816 Perf_Background_Dpkg.Psengout := False
7806  7817 Cdk_Vert_Dpkg:Body.Engine_Out_I := True
7807  7818 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
7808  7819 Perf_Dpkg.Repredict_Hm_Decel := True
7809  7820 Perf_Background_DPkg.Pshmdecel := True
7810  7821 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
7811  7822 Perf_Ads_Dpkg.Fi_Enabled := False
7812  7823 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
7813  7824 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
7814  7825 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
7815  7826 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
7816  7827 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
7817  7828 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
7818  7829 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
7819  7830 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
7820  7831 Perf_Background_Dpkg.Psappspdlat := True
7821  7832 Perf_Dpkg.Pcengoutprds := Altpln
7822  7833 Guid_Ext_Dpkg.Va3lcautoctl := True
7823  7834 Perf_Background_Dpkg.Psvgonpath := False
7824  7835 Perf_Background_Dpkg.Pcpathref := Onpath
7825  7836 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmspd
7826  7837 Perf_Background_DPkg.Pscurcas := 5.0
7827  7838 Perf_Background_DPkg.Pscurmach := 5.0
7828  7839 Perf_Background_DPkg.Pscurtas := 5.0
7829  7840 Perf_Despath_Dpkg.Pcdespath.Vgavalid := True
7830  7841 Perf_Background_Dpkg.Pstogwtval := False
7831  7842 Perf_Background_Dpkg.Pstogwt := 50.0
7832  7843 Perf_Background_Dpkg.Pcgwind := Invalid
```

```
7833   7844 Perf_Background_Dpkg.Psgw := 0.0
7834   7845 Perf_Dpkg.Gross_Weight.Status := Valid
7835   7846 Perf_Dpkg.Gross_Weight.Data := 150.0
7836   7847 Perf_Integration_DPkg.Pcairbrakes := Fullab
7837   7848 Perf_Background_Dpkg.Pcacconfig := 5
7838   7849 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := False
7839   7850 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
7840   7851 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
7841   7852 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
7842   7853 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
7843   7854 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
7844   7855 Perf_Background_Dpkg.Psstpclbact := True
7845   7856 Perf_Background_Dpkg.Psstpdesact := True
7846   7857 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
7847   7858 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
7848   7859 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
7849   7860 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
7850   7861 Perf_Background_Dpkg.Pccuraltcstr.Valid := True
7851   7862 Perf_Background_Dpkg.Pcprebcalt.Valid := True
7852   7863 Perf_Background_Dpkg.Pcgmttime.Hour := 1
7853   7864 Perf_Background_Dpkg.Pcgmttime.Minute := 1
7854   7865 Perf_Background_Dpkg.Pcgmttime.Second := 1
7855   7866 Perf_Background_Dpkg.Psinertvs := 5.0
7856   7867 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
7857   7868 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
7858   7869 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
7859   7870 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
7860   7871 Perf_Ads_Dpkg.Pr_Enabled := False
7861   7872 ATC_DISCRETES_PKG:body.Adson_Flag := False
7862   7873 Perf_Integration_Dpkg.Psoldnoentgt := 1.0
7863   7874 Perf_Background_Dpkg.Pcoldcasmchi := Fmcs_Base_Types.Mach
7864   7875 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID := true
7865   7876 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET := true
7866   7877 ^Noise_End_Alt_Status := Takeoff_Alt_Types.Active
7867   7878 ^Noise_Speed_Val := True
7868   7879 Perf_Background_Dpkg.Pcitin.Itinerary := Fuel_Plan_Fpln_Preds
7869   7880 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
7870   7881 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
7871   7882 Perf_Background_Dpkg.Psv2plus10                  := -1.0
7872   7883 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
7873   7884 # go
7874   7885 Perf_Dpkg.takeoff_gwt.valid := True
7875   7886 Perf_Dpkg.takeoff_gwt.data := 400.0
7876   7887 #DELB/ALL
```

```

!run_test()

-- OUTPUTS
Perf_Integration_Dpkg.Psoldnoentgt = 0.0
Perf_Background_Dpkg.Pcoldcasmchi = Cas
----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 53

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1,2,3 are satisfied, DES SPD LIM Perf leg is not Included, Perf_Buffer.Getperfleg procedure will be call
» ed and
Optimum Descent CAS will not be set.
PERF_SDD_08158_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                    := Is_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Psairborne                          := False
Guid_Spds_Dpkg.Vc3prtlimcas                              := 0.0

Perf_Background_Dpkg.Pcactorsec                          := Temporary
Perf_Background_Dpkg.Psdeslimspdchg                      := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim         := True

```

```
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := False
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included     := False

Perf_Background_Dpkg.Pcitin.Flight_Plan                  := Temporary
Perf_Background_Dpkg.Pcitin.Itinerary                    := Prim_Fpln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       := False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  0.0
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       = True

---------------------------------------------------------------------------------------------

TESTID: 54

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1 is not satisfied, Perf_Buffer.Getperfleg procedure will not be called and
Optimum Descent CAS will not be set.
PERF_SDD_08158_INT

When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
»  set to False.
1. First Preds After Insert Temporary indication is True or
2. The descent speed limit has not been latched or
3. The temporary flight plan does not exist.

Here verify condition (the flag Psdeslimspdchg is set) is not satisfied, Psdeslimspdchg will not be set.
PERF_SDD_08159_INT
```

```

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                    := Is_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Psairborne                          := False
Guid_Spds_Dpkg.Vc3prtlimcas                              := 0.0

Perf_Background_Dpkg.Pcactorsec                          := Temporary
Perf_Background_Dpkg.Psdeslimspdchg                      := False
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim         := True

FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := False
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included     := False

Perf_Background_Dpkg.Pcitin.Flight_Plan                  := Temporary
Perf_Background_Dpkg.Pcitin.Itinerary                    := Prim_Fpln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       := False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  0.0
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       = False
Perf_Background_Dpkg.Psdeslimspdchg                      = False
---------------------------------------------------------------------------------------------

TESTID: 55

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
```

```
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
 Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 2 is not satisfied, Perf_Buffer.Getperfleg procedure will not be called and
Optimum Descent CAS will not be set.
PERF_SDD_08158_INT

When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
»  set to False.
1. First Preds After Insert Temporary indication is True or
2. The descent speed limit has not been latched or
3. The temporary flight plan does not exist.

Here verify condition 2 (descent speed limit has not been latched) is  satisfied, Psdeslimspdchg will  be set to False
» .
PERF_SDD_08159_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                    := Is_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Psairborne                          := False
Guid_Spds_Dpkg.Vc3prtlimcas                              := 0.0

Perf_Background_Dpkg.Pcactorsec                          := Temporary
Perf_Background_Dpkg.Psdeslimspdchg                      := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim         := False

FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := True
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included     := False

Perf_Background_Dpkg.Pcitin.Flight_Plan                  := Temporary
Perf_Background_Dpkg.Pcitin.Itinerary                    := Prim_Fpln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       := False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
```

```

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  0.0
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       = False
Perf_Background_Dpkg.Psdeslimspdchg                      = False
---------------------------------------------------------------------------------------------

TESTID: 56

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
  Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1,2,3 are satisfied, DES SPD LIM Perf leg is Included, the VG Partially-Limited CAS is zero,
Perf_Buffer.Getperfleg procedure will be called and Optimum Descent CAS will be set to DES SPD LIM speed.
PERF_SDD_08158_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                    := Is_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Psairborne                          := False
Guid_Spds_Dpkg.Vc3prtlimcas                              := 0.0

Perf_Background_Dpkg.Pcactorsec                          := Temporary
Perf_Background_Dpkg.Psdeslimspdchg                      := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim         := True

FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := False
```

```
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included     := True
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Spd          := 160.0
Perf_Background_Dpkg.Pcpredcount(Temporary)              := 1

Perf_Background_Dpkg.Pcitin.Flight_Plan                  := Temporary
Perf_Background_Dpkg.Pcitin.Itinerary                    := Prim_Fpln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       := False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  160.0
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       = True
---------------------------------------------------------------------------------------------

TESTID: 57

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
 If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
 Otherwise,
 Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1,2,3 are satisfied, DES SPD LIM Perf leg is Included, the VG Partially-Limited CAS is not zero, and
the predictions count is less than or equal to one, verify Perf_Buffer.Getperfleg procedure will be called and
Optimum Descent CAS will be set to the VG Partially-Limited CAS
PERF_SDD_08158_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                    := Is_Active
```

```
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase       := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Psairborne                          := False
Guid_Spds_Dpkg.Vc3prtlimcas                              := 1.0

Perf_Background_Dpkg.Pcactorsec                          := Temporary
Perf_Background_Dpkg.Psdeslimspdchg                      := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim         := True

FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := False
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included     := True
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Spd          := 160.0
Perf_Background_Dpkg.Pcpredcount(Temporary)              := 1
Perf_Background_Dpkg.Psautolat                           := True
Perf_Background_Dpkg.Psappspdlat                         := False
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := False

Perf_Background_Dpkg.Pcitin.Flight_Plan                  := Temporary
Perf_Background_Dpkg.Pcitin.Itinerary                    := Prim_Fpln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       := False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  1.0
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       = True
---------------------------------------------------------------------------------------------

TESTID: 58

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
 If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
 Otherwise,
 Optimum Descent CAS is set to the DES SPD LIM speed.
```

```

Here conditon 1,2,3 are satisfied, DES SPD LIM Perf leg is Included, the VG Partially-Limited CAS is not zero, and
the predictions count is larger than to one, verify Perf_Buffer.Getperfleg procedure will be called and
Optimum Descent CAS will be set to DES SPD LIM speed.
PERF_SDD_08158_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                    := Is_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Psairborne                          := False
Guid_Spds_Dpkg.Vc3prtlimcas                              := 1.0

Perf_Background_Dpkg.Pcactorsec                          := Temporary
Perf_Background_Dpkg.Psdeslimspdchg                      := True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim         := True

FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists          := False
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included     := True
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Spd          := 160.0
Perf_Background_Dpkg.Pcpredcount(Temporary)              := 3
Perf_Background_Dpkg.Psautolat                           := True
Perf_Background_Dpkg.Psappspdlat                         := False
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := False

Perf_Background_Dpkg.Pcitin.Flight_Plan                  := Temporary
Perf_Background_Dpkg.Pcitin.Itinerary                    := Prim_Fpln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       := False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0

!run_test()

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                = 160.0
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE       = True

---------------------------------------------------------------------------------------------
TESTID: 59
```

```
    If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
» s are on,
    the aircraft gross weight shall be set to any one of the following:
   - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
» craft
     gross weight and Take Off gross weight being valid
   - Aircraft GW from the Performance Weights function,  if the flight phase is other
     than takeoff or before, or the aircraft gross weight or the Take Off gross weight
     being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT
    --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is Secondary,engines
»  are on,
    --the flight phase is Preflight,and the aircraftgross weight and Take Off gross weight being valid
    --then Aircraft Takeoff GW from the Performance Weights function

    If the current itinerary is neither Current Mode Predictions (Normal or High priority)
    nor Pred_to_alt itinerary, then the vertical mode(Pcvertmode) shall be set to Econ mode.
    PERF_SDD_07506(PERF_SRD_6192)
    --in this test case, the current itinerary is Pred_To_Alt_Preds
    Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
    are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
» d to FL250.
    PERF_SDD_07543_INT
    --in this test case, only Guid_Spds_Dpkg.Vc3curspds.Mach.Data  leaa than the lower limits, the other are satisfied
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07506(PERF_SRD_6192),
                                    PERF_SDD_07543_INT,PERF_SDD_07501_INT
    SUPPORTING REQUIREMENTS : N/A


--INPUTS
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Perf_Background_Dpkg.Pcitin.Itinerary := Pred_To_Alt_Preds
Perf_Background_Dpkg.Pcactorsec := Secondary
Perf_Dpkg.Pcfirstpred(Secondary) := false
Perf_Background_Dpkg.Psenginesoff := False
Perf_Background_Dpkg.Pcgwind := Valid
Perf_Dpkg.Gross_Weight.Status := Valid
Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
Guid_Ext_Dpkg.Va3vertmde := Perf_Ext_Tpkg.Vmspd
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Preflight
Perf_Background_Dpkg.Pstogwtval := true
```

```
8264   8275 Perf_Background_Dpkg.Psairborne := false
8265   8276 Guid_Spds_Dpkg.Vc3curspds.Cas.Valid := true
8266   8277 Guid_Spds_Dpkg.Vc3curspds.Cas.Data := 10.01
8267   8278 Guid_Spds_Dpkg.Vc3curspds.Mach.Valid := true
8268   8279 Guid_Spds_Dpkg.Vc3curspds.Mach.Data := 0.009
8269   8280 Perf_Background_Dpkg.Pcvertmode := Perf_Int_Base_Tpkg.Openclb
8270   8281 Perf_Dpkg.Takeoff_Gwt.Valid := true
8271   8282 Perf_Dpkg.Takeoff_Gwt.Data := 90.0
8272   8283 Perf_Background_Dpkg.Psgw := 0.0
8273   8284 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off := false
8274   8285 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude := True
8275   8286 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach     := true
8276   8287 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas      := True
8277   8288 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas      := True
8278   8289 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude := -2001
8279   8290 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected :=
            » true
8280   8291 CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt   :=25001.0
8281   8292 Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt := 25001.1
8282   8293
8283   8294 --this breakpiont is set to verify the GWT of PERF_SDD_07501_INT
8284        ~~#sba prf_bkgnd_pkg.get_bk_Data #889~~
       8295 #sba prf_bkgnd_pkg.get_bk_Data #896
8285   8296 #go
8286   8297 Perf_Background_Dpkg.Psgw = 90.0
8287   8298 --this breakpiont is set to verify PERF_SDD_07543_INT
8288        ~~#sba prf_bkgnd_pkg.get_bk_Data #1227~~
       8299 #sba prf_bkgnd_pkg.get_bk_Data #1234
8289   8300 #go
8290   8301 Curcas  = 0.0
8291   8302 Curmach = 0.0
8292   8303 Xoveralt = 25000.0
8293   8304
8294   8305 !run_test()
8295   8306 Perf_Background_Dpkg.Pcvertmode /= Perf_Int_Base_Tpkg.Econo
8296   8307 Perf_Background_Dpkg.Psgw =100.0
8297   8308 -----------------------------------------------------------------------------------------------------------------------
            » -
8298   8309 TESTID: 60
8299   8310     If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
            » s are on,
8300   8311     the aircraft gross weight shall be set to any one of the following:
8301   8312    - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
            » craft
```

```
     gross weight and Take Off gross weight being valid
   - Aircraft GW from the Performance Weights function,  if the flight phase is other
     than takeoff or before, or the aircraft gross weight or the Take Off gross weight
     being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT
    --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is active,engines are off,
    --the flight phase is Preflight,Take Off gross weight is valid, but the aircraft gross weightis invalid ,then Aircraft GW
    --from the Performance Weights function.
    Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
    are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulted to FL250.
    PERF_SDD_07543_INT
    --In this test case, only Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid is False
    --as Flifht phase is Take off also test the negative case of PERF_SDD_07540 and PERF_SDD_08227_INT
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07501_INT
    SUPPORTING REQUIREMENTS : N/A


--INPUTS
Perf_Dpkg.Min_Gwt := 100.0
Perf_Dpkg.Max_Gwt := 400.0
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Perf_Background_Dpkg.Pcitin.Itinerary := Pred_To_Alt_Preds
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Dpkg.Pcfirstpred(Active) := false
Perf_Background_Dpkg.Psenginesoff := True
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off := true
Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
Guid_Ext_Dpkg.Va3vertmde := Perf_Ext_Tpkg.Vmspd
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Preflight
Perf_Background_Dpkg.Pcgwind := Invalid
Perf_Background_Dpkg.Pstogwtval := true
Perf_Background_Dpkg.Psairborne := false
Guid_Spds_Dpkg.Vc3curspds.Cas.Valid := true
Guid_Spds_Dpkg.Vc3curspds.Cas.Data := 10.01
Guid_Spds_Dpkg.Vc3curspds.Mach.Valid := false
Guid_Spds_Dpkg.Vc3curspds.Mach.Data := 0.011
Perf_Background_Dpkg.Pcvertmode := Perf_Int_Base_Tpkg.Openclb
Perf_Dpkg.Gross_Weight.Status := Invalid
Perf_Dpkg.Takeoff_Gwt.Valid := True
Perf_Dpkg.Takeoff_Gwt.Data := 90.0
Perf_Dpkg.Gross_Weight.Data := 150.0
Perf_Background_Dpkg.Psgw := 0.0
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected :=
» false
CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt   :=25001.0
Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt := 25001.1

--this breakpiont is set to verify PERF_SDD_07543_INT
~~#sba prf_bkgnd_pkg.get_bk_Data #1227~~
#sba prf_bkgnd_pkg.get_bk_Data #1234
#go
Curcas  = 0.0
Curmach = 0.0
Xoveralt = 25000.0

!run_test()
Perf_Background_Dpkg.Psgw = 150.0

---------------------------------------------------------------------------------------------
TESTID: 61
    If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
» s are on,
    the aircraft gross weight shall be set to any one of the following:
   - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
» craft
     gross weight and Take Off gross weight being valid
   - Aircraft GW from the Performance Weights function,  if the flight phase is other
     than takeoff or before, or the aircraft gross weight or the Take Off gross weight
     being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT
    --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is active,engines ar
» e off,
    --the flight phase is Preflight,the aircraft gross weightis is valid, but the Take Off gross weight invalid ,then
» Aircraft GW
    --from the Performance Weights function.
    Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
    are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
» d to FL250.
    PERF_SDD_07543_INT
    --in this test case, only Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid is false, the other are satisfied
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07501_INT,PERF_SDD_07543_INT
    SUPPORTING REQUIREMENTS : N/A

```

```
8380  8391 
8381  8392 --INPUTS
8382  8393 Perf_Dpkg.Min_Gwt := 100.0
8383  8394 Perf_Dpkg.Max_Gwt := 400.0
8384  8395 Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
8385  8396 Perf_Background_Dpkg.Pcitin.Itinerary := Prim_Fpln_Preds
8386  8397 ATC_DISCRETES_PKG:body.Adson_Flag := True
8387  8398 Perf_Ads_Dpkg.Fi_Enabled := True
8388  8399 Guid_Ext_Dpkg.Gcxxlatautoc := False
8389  8400 Perf_Background_Dpkg.Ats_Enable := True
8390  8401 Perf_Background_Dpkg.Pcactorsec := Active
8391  8402 Perf_Dpkg.Pcfirstpred(Active) := false
8392  8403 Perf_Background_Dpkg.Psenginesoff := True
8393  8404 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off := true
8394  8405 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
8395  8406 Guid_Ext_Dpkg.Va3vertmde := Perf_Ext_Tpkg.Vmspd
8396  8407 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Preflight
8397  8408 Perf_Background_Dpkg.Pcgwind := valid
8398  8409 Perf_Background_Dpkg.Pstogwtval := false
8399  8410 Perf_Background_Dpkg.Psairborne := false
8400  8411 Guid_Spds_Dpkg.Vc3curspds.Cas.Valid := false
8401  8412 Guid_Spds_Dpkg.Vc3curspds.Cas.Data := 10.01
8402  8413 Guid_Spds_Dpkg.Vc3curspds.Mach.Valid := true
8403  8414 Guid_Spds_Dpkg.Vc3curspds.Mach.Data := 0.011
8404  8415 Perf_Background_Dpkg.Pcvertmode := Perf_Int_Base_Tpkg.Openclb
8405  8416 Perf_Dpkg.Gross_Weight.Status := valid
8406  8417 Perf_Dpkg.Takeoff_Gwt.Valid := false
8407  8418 Perf_Dpkg.Takeoff_Gwt.Data := 90.0
8408  8419 Perf_Dpkg.Gross_Weight.Data := 150.0
8409  8420 Perf_Background_Dpkg.Psgw := 0.0
8410  8421 --this breakpiont is set to verify PERF_SDD_07543_INT
8411       #sba prf_bkgnd_pkg.get_bk_Data #1227
      8422 #sba prf_bkgnd_pkg.get_bk_Data #1234
8412  8423 #go
8413  8424 Curcas  = 0.0
8414  8425 Curmach = 0.0
8415  8426 Xoveralt = 25000.0
8416  8427 
8417  8428 !run_test()
8418  8429 Perf_Background_Dpkg.Psgw = 150.0
8419  8430 ---------------------------------------------------------------------------------------------
8420  8431 TESTID: 62
8421  8432     If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
8422  8433     is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the working flight plan is Active or Temporary, then the Secondary flight plan Predictions flag and
    the What-If predictions enabled flag shall be set to false.
    PERF_SDD_08665(PERF_SRD_23775)

    In this case:
    the working flight plan is Active
    the current barometric reference is not QNH and QFE
    the current barometric reference data retrieved from IO is invalid
    so
    the Secondary flight plan Predictions flag should be set false
    the What-If predictions enabled flag should be set to false
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to false


--INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL := false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data := false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL := false
Perf_Background_Dpkg.QNH_QFE_Selected := True
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec) := True
Perf_Background_Dpkg.Secn_Fpln_Itin := True

!run_test()
Perf_Background_Dpkg.QNH_QFE_Selected = false
Perf_Background_Dpkg.Secn_Fpln_Itin = false
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec) = false

-------------------------------------------------------------------------------------------------
TESTID: 63
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the working flight plan is Active or Temporary, then the Secondary flight plan Predictions flag
    and the What-If predictions enabled flag shall be set to false.
    PERF_SDD_08665(PERF_SRD_23775)

    If the working flight plan is a Secondaryn Flight plan, then the What-If Pseudo button push type shall be set base
» d on the
    current flight plan type.
    For Secondary flight plan, the pseudo button push type is Pb_Sec_What_If_Cancelled.
    For Secondary2 flight plan, the pseudo button push type is Pb_Sec2_What_If_Cancelled.
    For Secondary3 flight plan, the pseudo button push type is Pb_Sec3_What_If_Cancelled.
    PERF_SDD_08667(PERF_SRD_23774)

    In this case:
    the working flight plan is Temporary
    the current barometric reference is not QNH and QFE
    the current barometric reference data retrieved from IO is valid
    so
    the Secondary flight plan Predictions flag should be set false
    the What-If predictions enabled flag should be set to false
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to false
    the pseudo button push type is default.


--INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL := false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL := false
Perf_Background_Dpkg.QNH_QFE_Selected := True
Perf_Background_Dpkg.Pcactorsec := Temporary
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec) := True
Perf_Background_Dpkg.Secn_Fpln_Itin := True
Perf_Background_Dpkg.What_If_Data.Pseudo_Button := 0

!run_test()
Perf_Background_Dpkg.QNH_QFE_Selected = false
Perf_Background_Dpkg.Secn_Fpln_Itin = false
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec) = false
Perf_Background_Dpkg.What_If_Data.Pseudo_Button = 0
----------------------------------------------------------------------------------------------------
TESTID: 64
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the working flight plan is Active or Temporary, then the Secondary flight plan Predictions flag and
    the What-If predictions enabled flag shall be set to false.
    PERF_SDD_08665(PERF_SRD_23775)

    If the current flight plan is a Copy Active Secondaryn FPLN, then the following shall be Done:
    - The Secondary flight plan predictions flag is set to True, if the current itinerary is primary flight plan predictions.
    - The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Maximum_Alt.
    - The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_Maximum_Alt
    PERF_SDD_08666(PERF_SRD_23775)

    In this case:
    the current flight plan type is a Copy Active
    the working flight plan is Secondary
    the current itinerary is primary flight plan predictions
    the current barometric reference is QNH
    the current barometric reference data retrieved from IO is invalid
    so
    the Secondary flight plan Predictions flag should be set True
    the What-If predictions enabled flag should be default
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be set to false
    The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Maximum_Alt.
    The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_Maximum_Alt


--INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Copy_From_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data := false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL := false
Perf_Background_Dpkg.QNH_QFE_Selected := True
Perf_Background_Dpkg.Pcactorsec := Secondary
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec) := True
Perf_Background_Dpkg.Secn_Fpln_Itin := True
Perf_Background_Dpkg.Pcitin.Itinerary := Prim_Fpln_Preds
Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.20
Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.30
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid := false
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid := false
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data := 0.00
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data := 0.00

!run_test()
Perf_Background_Dpkg.QNH_QFE_Selected = false
Perf_Background_Dpkg.Secn_Fpln_Itin = True
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec) = True
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid = True
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid = True
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data = 32.20
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data = 32.30
----------------------------------------------------------------------------------------------------
TESTID: 65
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the current flight plan is a Copy Active Secondaryn FPLN, then the following shall be Done:
    - The Secondary flight plan predictions flag is set to True, if the current itinerary is primary flight plan predi
» ctions.
    - The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Ma
» ximum_Alt.
    - The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_
» Maximum_Alt
    PERF_SDD_08666(PERF_SRD_23775)

    If the working flight plan is a Secondaryn Flight plan, then the What-If Pseudo button push type shall be set base
» d on
    the current flight plan type.
    For Secondary flight plan, the pseudo button push type is Pb_Sec_What_If_Cancelled.
    For Secondary2 flight plan, the pseudo button push type is Pb_Sec2_What_If_Cancelled.
    For Secondary3 flight plan, the pseudo button push type is Pb_Sec3_What_If_Cancelled.
    PERF_SDD_08667(PERF_SRD_23774)

    in this case:
    the current flight plan type is a Copy Active
    the working flight plan is Secondary
    the current itinerary is CURRENT VERTICAL MODE PREDS DURING 1ST 2 PASSES OF PREDS
    the current barometric reference is QNH
    the current barometric reference data retrieved from IO is valid
    so
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
```

```
» t to True
    the Secondary flight plan Predictions flag should be set false
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to false
    The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Maxi
» mum_Alt
    The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_Ma
» ximum_Alt
    the pseudo button push type is Pb_Sec_What_If_Cancelled


--INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Copy_From_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL := false
Perf_Background_Dpkg.QNH_QFE_Selected := false
Perf_Background_Dpkg.Pcactorsec := Secondary
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec) := True
Perf_Background_Dpkg.Secn_Fpln_Itin := True
Perf_Background_Dpkg.Pcitin.Itinerary := Current_Mode_Preds
Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.20
Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.30
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid := false
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid := false
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data := 0.00
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data := 0.00
Perf_Background_Dpkg.What_If_Data.Pseudo_Button := 0

!run_test()
Perf_Background_Dpkg.QNH_QFE_Selected = True
Perf_Background_Dpkg.Secn_Fpln_Itin = false
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid = True
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid = True
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data = 32.20
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data = 32.30
Perf_Background_Dpkg.What_If_Data.Pseudo_Button = 52
----------------------------------------------------------------------------------------------------
TESTID: 66
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the working flight plan is a Secondaryn Flight plan, then the What-If Pseudo button push type shall be set base
» d
    on the current flight plan type.
    For Secondary flight plan, the pseudo button push type is Pb_Sec_What_If_Cancelled.
    For Secondary2 flight plan, the pseudo button push type is Pb_Sec2_What_If_Cancelled.
    For Secondary3 flight plan, the pseudo button push type is Pb_Sec3_What_If_Cancelled.
    PERF_SDD_08667(PERF_SRD_23774)

    in this case:
    the working flight plan is Secondary2
    the current barometric reference is QFE
    the current barometric reference data retrieved from IO is invalid
    so
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to false
    the pseudo button push type is Pb_Sec2_What_If_Cancelled


--INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL := false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data := false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL := True
Perf_Background_Dpkg.QNH_QFE_Selected := True
Perf_Background_Dpkg.Pcactorsec := Secondary2
Perf_Background_Dpkg.What_If_Data.Pseudo_Button := 0

!run_test()
Perf_Background_Dpkg.QNH_QFE_Selected = false
Perf_Background_Dpkg.What_If_Data.Pseudo_Button = 54
--------------------------------------------------------------------------------------------------------
TESTID: 67
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the working flight plan is a Secondaryn Flight plan, then the What-If Pseudo button push type shall be set base
» d
    on the current flight plan type.
    For Secondary flight plan, the pseudo button push type is Pb_Sec_What_If_Cancelled.
    For Secondary2 flight plan, the pseudo button push type is Pb_Sec2_What_If_Cancelled.
    For Secondary3 flight plan, the pseudo button push type is Pb_Sec3_What_If_Cancelled.
    PERF_SDD_08667(PERF_SRD_23774)

    in this case:
    the working flight plan is Secondary3
    the current barometric reference is QFE
    the current barometric reference data retrieved from IO is valid
    so
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to True
    the pseudo button push type is Pb_Sec3_What_If_Cancelled


--INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL := false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data := True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL := True
Perf_Background_Dpkg.QNH_QFE_Selected := false
Perf_Background_Dpkg.Pcactorsec := Secondary3
Perf_Background_Dpkg.What_If_Data.Pseudo_Button := 0

!run_test()
Perf_Background_Dpkg.QNH_QFE_Selected = True
Perf_Background_Dpkg.What_If_Data.Pseudo_Button = 55
--------------------------------------------------------------------------------------------------------
TESTID: 68

    For an independent from-to pair Secondaryn flight plan, the starting predictions data shall be set up
    as if the aircraft were sitting on the ground in pre-flight at the origin airport of the Secondaryn flight plan,
    rather than from the current aircraft state.  Thus, following data are set:
    - The airborne flag (Psairborne) is set false.
    - Auto lateral mode (Psautolat) is set to true.
    - Engine out flag (Psengout) is set to false.
    - The current flightphase (Pcfltphase) is set to pre-flight.
    - Speed mode (Pcspeedmode) is set to Vmecon.
    - Despath reference (Pcpathref) is set to Nopath.
    - Current GMT time (Pcgmttime) (Hours, Minutes & Seconds) is set to zero.
    - Inertial vertical speed (Psinertvs) is set to zero.
    - Current aircraft speeds (Pscurtas, Pscurmach & Pscurcas) are set to zero.
    - Validity of Aircraft True air speed (Pscurtasvalid) set to False
    - Aircraft configuration (Pcacconfig) is set to clean.
    - Airbrakes (Pcairbrakes) are set to zero airbrakes.
    - Constraint management (Pccuraltcstr) validity is set to false.
```

```
  - Previous captured barometric altitude (Pcprebcalt) validity is set to false.
  - All the flags in the perf hold flag record (Pcholdflags) are set to false.
  - All the flags in the descent limit latch record (Pcdeslimlat) are set to false.
  - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false.
  - Flag indicating aircraft is within 3 NM prior to the entry of the HM(Psconsider_Hm) is      set to false.
  - Flag indicating aircraft is in HA/HF decel zone (Pshxpxdecel) is set to false.
  - Flag indicating aircraft is in HM decel zone (Pshmdecel) is set to false.
  - Flag indicating to Ignore HM (Psignorehm) is set to true.
  - Background step climb & step descent active flags (Psstpclbact & Psstpdesact) are set     to false.
  - Engines off status (Psenginesoff) is set to true (off).
  - Aircraft engine or wing anti ice (Ac_Anti_Ice) is set to false (Off).
  - Aircraft bleeds status (Ac_Bleeds); Engine Cowl Anti-Ice bleed, Wing Anti-Ice Bleed and
    Air Conditioning Bleed are set to false (off).
  - Cruise altitude (Pscrzalt) data is set by calling procedure
    Fpln_Ext_Dpkg.Get_Cruise_Alt.
  - Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
    Data and Valid values respectively.
  - Valid cruise altitude flag (Valcrzalt) is set from the retrieved cruise altitude data.
  - ADC/FG input data (Adc_Fg_Valid) validity is set to true.
  - Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to true.
  - The Secondary flight plan predictions flag is set to True, if the current itinerary is primary flight plan predictions.
  - The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Maximum_Alt.
  - The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_Maximum_Alt.

  These initializations make predictions independent of the Active Primary flightplan and current aircraft characteristics
  PERF_SDD_4796(PERF_SRD_1592, PERF_SRD_23775, PERF_SRD_6005_INT)

   the working flight plan is not Is_Active and Copy_From_Active,
    a variety of following global data shall be not retrieved which are common to the Active flight plan predictions process.
    - A/C is below a NAVDB imposed TDP segment (Below_Navdb_Imposed_Segment) from
    guidance
    - Guidance provided TDP capture tolerance
   - when the Engine out status and the VG indicator that Green-Dot Speed is latched,
     The flag indicating that VG is using latched Green-Dot descent speed is set.

   PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
                  PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
                  PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

```

```
8749  8760     in this case,
8750  8761     flight plan is Secondary
8751  8762     the current itinerary is not primary flight plan predictions
8752  8763
8753  8764
8754  8765 -- INPUTS
8755  8766 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec := False
8756  8767 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec := False
8757  8768 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec := False
8758  8769 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec := False
8759  8770 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := False
8760  8771 Perf_Dpkg.Min_Gwt := 100.0
8761  8772 Perf_Dpkg.Max_Gwt := 400.0
8762  8773 Prf_Bkgnd_Pkg:BODY.Valcrzalt := False
8763  8774 Perf_Background_Dpkg.Pcactorsec:= Secondary
8764  8775 Perf_Background_Dpkg.Flight_Plan_Type := No_Preds
8765  8776 Perf_Background_Dpkg.Pcitin.Flight_Plan := Secondary
8766  8777 Perf_Background_Dpkg.Psignorehm := False
8767  8778 Perf_Background_Dpkg.Pcfltphase := Cruise
8768  8779 Perf_Background_Dpkg.Ats_Enable := True
8769  8780 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
8770  8781 Perf_Background_Dpkg.Psacalt := 10000.0
8771  8782 Perf_Database_Dpkg.Psmmo := 0.45
8772  8783 Perf_Background_Dpkg.Pszfw := 300.0
8773  8784 Perf_Background_Dpkg.Psblockfuel := 50.0
8774  8785 Perf_Background_Dpkg.Pstaxifuel := 25.0
8775  8786 Perf_Background_Dpkg.Psairborne := True
8776  8787 Perf_Background_Dpkg.Psautolat := False
8777  8788 Guid_Ext_Dpkg.Gcxxlatautoc := False
8778  8789 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE := False
8779  8790 Perf_Background_Dpkg.Psengout := True
8780  8791 Cdk_Vert_Dpkg:Body.Engine_Out_I := False
8781  8792 Perf_Background_Dpkg.Pcholdflags.Hmdecel := True
8782  8793 Perf_Dpkg.Repredict_Hm_Decel := True
8783  8794 Perf_Background_DPkg.Pshmdecel := True
8784  8795 Perf_Background_Dpkg.Pcholdflags.Hmactive := True
8785  8796 Perf_Ads_Dpkg.Fi_Enabled := False
8786  8797 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive := False
8787  8798 Perf_Background_Dpkg.Pcholdflags.Manhmwarn := True
8788  8799 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel := True
8789  8800 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv := True
8790  8801 Perf_Background_Dpkg.Pcholdflags.Hmdistval := True
8791  8802 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim := True
8792  8803 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
Perf_Integration_Dpkg.Pcdeslimlat.Desdecel := True
Perf_Background_Dpkg.Psappspdlat := True
Perf_Dpkg.Pcengoutprds := Altpln
Perf_Background_Dpkg.Pcpathref := Onpath
Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
Perf_Background_DPkg.Pscurcas := 5.0
Perf_Background_DPkg.Pscurmach := 5.0
Perf_Background_DPkg.Pscurtas := 5.0
Perf_Background_Dpkg.Psenginesoff := False
Perf_Despath_Dpkg.Pcdespath.Vgavalid := False
Perf_Background_Dpkg.Pstogwtval := False
Perf_Background_Dpkg.Pstogwt := 50.0
Perf_Background_Dpkg.Pcgwind := Invalid
Perf_Background_Dpkg.Psgw := 0.0
Perf_Dpkg.Gross_Weight.Status := Valid
Perf_Dpkg.Gross_Weight.Data := 150.0
Perf_Integration_DPkg.Pcairbrakes := Fullab
Perf_Background_Dpkg.Pcacconfig := 5
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included := True
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt := 9000.0
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 200.0
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd := 400.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
Perf_Background_Dpkg.Psstpclbact := True
Perf_Background_Dpkg.Psstpdesact := True
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 0.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.0
Guid_Spds_Dpkg.Vc3Curspds.Mach.Data := 0.65
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data := 345.0
Perf_Background_Dpkg.Pccuraltcstr.Valid := True
Perf_Background_Dpkg.Pcprebcalt.Valid := True
Perf_Background_Dpkg.Pcgmttime.Hour := 1
Perf_Background_Dpkg.Pcgmttime.Minute := 1
Perf_Background_Dpkg.Pcgmttime.Second := 1
Perf_Background_Dpkg.Psinertvs := 5.0
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints := 0
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints := 2
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points := 0
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points := 2
Perf_Ads_Dpkg.Pr_Enabled := False
ATC_DISCRETES_PKG:body.Adson_Flag := False
Perf_Integration_Dpkg.Psoldnoentgt := 0.0
```

```
8837  8848 Perf_Background_Dpkg.Pcoldcasmchi := Fmcs_Base_Types.Mach
8838  8849 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmspd
8839  8850 Perf_Background_Dpkg.Adc_Fg_Valid := False
8840  8851 Prf_Bkgnd_Pkg:body.Fgspdsvalid := False
8841  8852 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt_Status  := Takeoff_Alt_Types.Active
8842  8853 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_Speed_Val := False
8843  8854 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt :=  300.0
8844  8855 Perf_Background_Dpkg.Noise_Data.Altitude.Data := 0.0
8845  8856 Perf_Background_Dpkg.Noise_Data.Altitude.Valid := False
8846  8857 Perf_Background_Dpkg.Noise_Data.Speed.Valid := True
8847  8858 Perf_Background_Dpkg.Pcitin.Itinerary := Prim_Fpln_Preds
8848  8859 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
8849  8860 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
8850  8861 Perf_Background_Dpkg.Ac_Crosstrack_Error         := 2.5
8851  8862
8852  8863 Perf_Background_Dpkg.Pscurtasvalid               := True
8853  8864 Perf_Background_Dpkg.Psconsider_Hm               := True
8854  8865 Perf_Background_Dpkg.Pshxpxdecel                 := True
8855  8866 Perf_Background_Dpkg.Ac_Anti_Ice                 := True
8856  8867 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai         := True
8857  8868 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai           := True
8858  8869 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond          := True
8859  8870 Perf_Background_Dpkg.Pcholdflags.Consider_Hm     := True
8860  8871 #define Get_Cruise_Alt_Called := False
8861  8872
8862  8873 Perf_Dpkg.takeoff_gwt.valid := True
8863  8874 Perf_Dpkg.takeoff_gwt.data := 400.0
8864  8875 Perf_Background_Dpkg.Psgetout := True
8865  8876 Perf_Background_Dpkg.Ref_Flight_Plan := 1
8866  8877 Perf_Ext_Despath:Body.data_storage(Active).Pgvdespath.Vgavalid := True
8867  8878 Perf_Despath_Dpkg.Pcdespath.Vgavalid := true
8868  8879 Perf_Background_Dpkg.Pcitin.Itinerary := Current_Mode_Preds
8869  8880 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
8870  8881 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
8871  8882 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.20
8872  8883 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.30
8873  8884 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid := false
8874  8885 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid := false
8875  8886 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data := 0.00
8876  8887 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data := 0.00
8877  8888
8878  8889 Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd := True
8879  8890 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment := False
8880  8891 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol := 100.00
```

```
Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance  := 188.00
Perf_Background_Dpkg.Psgrndotdes := true
Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes := true
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.valid  := False
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data   := 0.0

#sba Fpln_Ext_Dpkg.Get_Cruise_Alt after_elab begin
#define Get_Cruise_Alt_Called   := True
#go
#end

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment = False
Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol = 100.00
Perf_Background_Dpkg.Psgrndotdes = true

Perf_Integration_Dpkg.Psoldnoentgt = 0.0
Perf_Background_Dpkg.Pcoldcasmchi = Fmcs_Base_Types.Mach
Perf_Despath_Dpkg.Pcdespath.Vgavalid /= False

Perf_Background_Dpkg.Psairborne = False
Perf_Background_Dpkg.Psautolat = True
Perf_Background_Dpkg.Psengout = False
Perf_Background_Dpkg.Psgetout = TRUE
Perf_Background_Dpkg.Pcfltphase = Preflight
Perf_Background_Dpkg.Pcspeedmode = Perf_Ext_Tpkg.Vmecon
Perf_Background_Dpkg.Psinertvs = 0.0
Perf_Background_Dpkg.Pcpathref = Nopath
Perf_Background_Dpkg.Pscurtasvalid = False
Perf_Background_Dpkg.Pcacconfig = Clean
Perf_Integration_Dpkg.Pcairbrakes = Zeroab
Perf_Background_Dpkg.Pccuraltcstr.Valid = False
Perf_Background_Dpkg.Pcprebcalt.Valid = False
Perf_Background_Dpkg.Psappspdlat      = False
Perf_Background_DPkg.Pshmdecel        = False
Perf_Background_Dpkg.Psconsider_Hm    = False
Perf_Background_Dpkg.Pshxpxdecel      = False
Perf_Background_Dpkg.Psignorehm       = True
Perf_Background_Dpkg.Psstpclbact = False
Perf_Background_Dpkg.Psstpdesact = False
Perf_Background_Dpkg.Psenginesoff = True
Perf_Background_Dpkg.Ac_Anti_Ice  = False
```

```
8925  8936 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai = False
8926  8937 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai   = False
8927  8938 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond  = False
8928  8939 Prf_Bkgnd_Pkg:BODY.Valcrzalt = Perf_Background_Dpkg.Pscrzalt.Valid
8929  8940 Perf_Background_Dpkg.Adc_Fg_Valid = True
8930  8941 Prf_Bkgnd_Pkg:body.Fgspdsvalid = True
8931  8942 Perf_Background_Dpkg.Pcholdflags.Hmdecel = False
8932  8943 Perf_Background_Dpkg.Pcholdflags.Hmactive = False
8933  8944 Perf_Background_Dpkg.Pcholdflags.Manhmwarn = False
8934  8945 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel = False
8935  8946 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv = False
8936  8947 Perf_Background_Dpkg.Pcholdflags.Hmdistval = False
8937  8948 Perf_Background_Dpkg.Pcholdflags.Consider_Hm =False
8938  8949 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim = False
8939  8950 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim = False
8940  8951 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel = False
8941  8952 Perf_Background_Dpkg.Pcgmttime.Hour = 0
8942  8953 Perf_Background_Dpkg.Pcgmttime.Minute = 0
8943  8954 Perf_Background_Dpkg.Pcgmttime.Second = 0
8944  8955 Perf_Background_DPkg.Pscurcas = 0.0
8945  8956 Perf_Background_DPkg.Pscurmach = 0.0
8946  8957 Perf_Background_DPkg.Pscurtas = 0.0
8947  8958 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas = 0.0
8948  8959 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach = 0.0
8949  8960 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec = False
8950  8961 Perf_Background_Dpkg.Ac_Crosstrack_Error      = 0.0
8951  8962 Get_Cruise_Alt_Called                         = True
8952  8963 Perf_Background_Dpkg.Noise_Data.Altitude.Valid = True
8953  8964 Perf_Background_Dpkg.Noise_Data.Altitude.Data  = 300.0
8954  8965 Perf_Background_Dpkg.Noise_Data.Speed.Valid = False
8955  8966 Perf_Background_Dpkg.Secn_Fpln_Itin = false
8956  8967 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid = True
8957  8968 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid = True
8958  8969 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data = 32.20
8959  8970 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data = 32.30
8960  8971 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.valid  = True
8961  8972 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data   = 5.0
8962  8973
8963  8974 ----------------------------------------------------------------------------------------
8964  8975 TESTID: 69
8965  8976
8966  8977 *When any of the following conditions are satisfied
8967  8978 (1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
8968  8979     Noise_Thrust_Target from VGUIDE is valid.
```

```
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is  not true
   Navigation(Nav Filtered) A/C Altitude is Valid
   Noise End altitude is invalid
   the Noise_Thrust_Target from VGUIDE is valid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.


--INPUTS

Perf_Background_Dpkg.Pcactorsec := Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := False
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target := (10.6, True)
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start := False
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid                   := True
Navigation_Data.Aircraft_Altitude_Valid := True
Navigation_Data.Aircraft_Altitude := 53.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status  := Takeoff_Alt_Types.Inactive
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val := False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt :=  90.0
Perf_Background_Dpkg.Psengout := True
-- Reset Output
Perf_Background_Dpkg.Flex_Isadev.Data   := 5.0
Perf_Background_Dpkg.Noise_Data.Ramping := True
!run_test()
```

```

-- OUTPUTS
Perf_Background_Dpkg.Noise_Data.Ramping = False
-------------------------------------------------------------------------------------
TESTID: 70

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is not true
   Navigation(Nav Filtered) A/C Altitude is invalid
   Noise End altitude is valid
   the Noise_Thrust_Target from VGUIDE is valid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.


--INPUTS

Perf_Background_Dpkg.Pcactorsec := Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := False
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target := (10.6, True)
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start := False
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid                   := True
Navigation_Data.Aircraft_Altitude_Valid := False
Navigation_Data.Aircraft_Altitude := 53.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status  := Takeoff_Alt_Types.Active
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val := False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt :=  90.0
Perf_Background_Dpkg.Psengout := False
-- Reset Output
Perf_Background_Dpkg.Flex_Isadev.Data   := 5.0
Perf_Background_Dpkg.Noise_Data.Ramping := True
!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Noise_Data.Ramping = False
----------------------------------------------------------------------------------
TESTID: 71

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is not true
   Navigation(Nav Filtered) A/C Altitude is Valid
   Noise End altitude is valid
   the Noise_Thrust_Target from VGUIDE is valid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is less than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.


--INPUTS

```

```
Perf_Background_Dpkg.Pcactorsec := Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := False
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target := (10.6, True)
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start := False
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid                  := True
Navigation_Data.Aircraft_Altitude_Valid := True
Navigation_Data.Aircraft_Altitude := 53.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status  := Takeoff_Alt_Types.Active
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val := False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt :=  300.0
Perf_Background_Dpkg.Psengout := False
-- Reset Output
Perf_Background_Dpkg.Flex_Isadev.Data   := 5.0
Perf_Background_Dpkg.Noise_Data.Ramping := True
!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Noise_Data.Ramping = False
-------------------------------------------------------------------------------
TESTID: 72

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is not true
   Navigation(Nav Filtered) A/C Altitude is Valid
   Noise End altitude is valid
   the Noise_Thrust_Target from VGUIDE is valid.
   the Navigation(Nav Filtered) A/C altitude is greater than the Noise end altitude
   current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.


--INPUTS

Perf_Background_Dpkg.Pcactorsec := Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid := False
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data  := 21.0
Perf_Background_Dpkg.Psorgalt := 36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target := (10.6, True)
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start := False
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid                   := True
Navigation_Data.Aircraft_Altitude_Valid := True
Navigation_Data.Aircraft_Altitude := 93.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status  := Takeoff_Alt_Types.Active
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val := False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt :=  90.0
Perf_Background_Dpkg.Psengout := False
-- Reset Output
Perf_Background_Dpkg.Flex_Isadev.Data   := 5.0
Perf_Background_Dpkg.Noise_Data.Ramping := True
!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Noise_Data.Ramping = False

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 73

     The following data shall be initialized as specified irrespective of the kind of flight plan:
     - Compute old target speed flag (Computoldtgt) = False;
     - Current target speed flag from FG(Curspdsval) = True;
     - Climb auto derate mode active(Use_Clb_Autodrt) = False;
     - First pass of predictions (Psfirstpass) = True;
     - First pass of forward predictions (Psonofrstpas) = True;
     - Flight test write protect (Psftpbwritok) = True;
     - Vertical speed mode active (Psvsact) = False;
     - Flight path angle mode active (Psfpaact) = False;
- Level at baro-changed constraint altitude (Pslvlatbcalt) = False;
- Below path and level at an altitude constraint (Pslvlblwpth) = False;
- Ratio of potential energy to kinetic energy (Potential_To_Kinetic_Share) is initialized to
ratio of potential energy to kinetic energy applied for integration of descent segments.
- First pass of predicitions flag repacked for FTB is initialized by flag for first pass
through predictions;
- Thrust reduction altitudes (Psthredalt & Psdesthrdalt) are initialized by calling the
procedure Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt
- Unpredicted Fix-Info points exist (Psfi_Possble) = False;
- Predicted state on decel to ICAO-limited leg (On_Icao_Leg_Decel) = False;
- Do not search for HM decels (Psignorehm) = False;
- Previous reason for speed change (Pcoldwspdchg) = Return to econ speed (Returntoecon)
- Filtered A/C altitude (Navigation Data) is initialized by current aircraft altitude;
- Get the below descent path below DSL vertical speed target in FT/SEC by calling
  Guid_Ext_Dpkg.Vs_Target_Below_Speed_Limit and dividing the returned value
  (FT/MIN) by 60.0;
- Maximum operating CAS and Mach data initialized from database vmo and mmo and
the delta values obtained by calling Prf_External_Util_Pkg.Get_Maxop_Delta
- Predicted aircraft configuration (Pcconfig) is set to clean.
- Flag indicating that the TDP Level segment at or below clearance altitude
(Tdp_Level_Seg_At_Or_Below_Clralt) is set to False.
- The flag indicating level prediction is determined in current mode due to clearance
altitude or due to aircraft flying in level is set to false.
- The flag indicating the current mode has called state integrator to predict a level1 or
tod2 pseudo locations on TDP is set to false.
- The flag indicating clearance altitude set above the descent speed limit and below the
  descent speed limit deceleration start point is set to false.

PERF_SDD_4155_INT

the working flight plan is  Is_Active,
a variety of following global data shall be retrieved which are common to the Active flight plan predictions proc
» ess.
- A/C is below a NAVDB imposed TDP segment (Below_Navdb_Imposed_Segment) from guidance
- Guidance provided TDP capture tolerance
- when the Engine out status and the VG indicator that Green-Dot Speed is latched,
  then the flag indicating that VG is using latched Green-Dot descent speed is set

PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
              PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
              PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

the current flight phase is not climb, Flag indicating the speed targets from FG are valid will not be changed.

```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
    PERF_SDD_08226(PERF_SRD_2801,PERF_SRD_23365,PERF_SRD_23455)

    Ithe current flight phase is cruise
    the real time cruise speeds are valid for current working flight plan and the real time
    step speeds are valid and a step (climb and descent) is active ,so
    -The original step speeds (CAS and Mach) before speed limiting are set to the real
    time step speeds (CAS and Mach) respectively.
    -The flag indicating Predictions are in step is set based on the Step descent active
    flag from Guidance.
    -The Step CAS and Mach speeds are set to the real time step speeds CAS and Mach
    respectively.
    -Optimum Econ/LRC Cruise CAS and Mach are set to the real time cruise CAS and
    Mach speeds for the active flight plan.

   PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)

   the real time descent speeds are valid for current working flight plan
   Optimum Econ/LRC descent CAS and Mach shall set to the real time descent CAS and Mach respectively.

   PERF_SDD_09064(PERF_SRD_23503_INT,PERF_SRD_2489)


-- INPUTS
Perf_Background_Dpkg.Use_Clb_Autodrt := True
Perf_Dpkg.Potential_To_Kinetic_Share := 200.0
Perf_Dpkg.Des_Potential_To_Kinetic_Share := 501.0
Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass := False
Perf_Background_Dpkg.Psfirstpass := False
Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid := False
Navigation_Data.Aircraft_Altitude_Valid := True
Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data := 100.00
Navigation_Data.Aircraft_Altitude := 93.20
Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred := True
Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred := True
Perf_Background_Dpkg.Pcconfig := Perf_Config_Dpkg.Fidconfidx
Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd := True
Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment := False
Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol := 100.00
Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance  := 188.00
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Pcfltphase := Cruise
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
```

```
 9275   9286 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas := 265.0
 9276   9287 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach := 0.55
 9277   9288 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := True
 9278   9289 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas := 288.0
 9279   9290 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach := 0.66
 9280   9291 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
 9281   9292 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
 9282   9293 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
 9283   9294 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := True
 9284   9295 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
 9285   9296 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec ) := 100.00
 9286   9297 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec ) := 0.12
 9287   9298 Perf_Background_Dpkg.Psinstep := False
 9288   9299 Perf_Background_Dpkg.Psstepcas := 200.00
 9289   9300 Perf_Background_Dpkg.Psstepmach := 0.35
 9290   9301 Perf_Background_Dpkg.Psecncrzmach :=200.0
 9291   9302 Perf_Background_Dpkg.Psecncrzcas := 0.55
 9292   9303 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 100.12
 9293   9304 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.78
 9294   9305 Perf_Background_Dpkg.Psthredalt := 100.0
 9295   9306 Perf_Background_Dpkg.Psdesthrdalt := 800.0
 9296   9307 Perf_Background_Dpkg.Tdp_Level_Seg_At_Or_Below_Clralt := true
 9297   9308 Perf_Database_Dpkg.Psmmo := 0.45
 9298   9309 Perf_Database_Dpkg.Psvmo :=0.0
 9299   9310 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Def_Thrust_Reduction_Alt_Arr(Active).Data(Fprequestrec_Types.Takeoff).Altitude :=
             » 866
 9300   9311 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Def_Thrust_Reduction_Alt_Arr(Active).Data(Fprequestrec_Types.Goaround).Altitude :=
             »  955
 9301   9312 Perf_Background_Dpkg.Psgrndotdes := False
 9302   9313 Perf_Background_Dpkg.Psengout := False
 9303   9314 Cdk_Vert_Dpkg:Body.Engine_Out_I := true
 9304   9315 Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes := true
 9305   9316 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True
 9306   9317 Perf_Background_Dpkg.Clralt_Below_Des_Spd_Lim_Decel_Start   := True
 9307   9318 Perf_Background_Dpkg.Below_Path_Pred.Below_DSL_VS_Target    := 0.0
 9308   9319
 9309   9320 #define Get_Def_Thrust_Reduction_Alt_Called := False
 9310   9321 #define Get_Maxop_Delta_Called := False
 9311   9322
 9312   9323 #sba prf_bkgnd_pkg.get_bk_Data after_elaboration
 9313   9324 # go
 9314   9325 Computoldtgt := True
 9315   9326 Curspdsval := False
 9316   9327 Perf_Background_Dpkg.Psfirstpass := False
```

```
9317  9328 Perf_Background_Dpkg.Psonofrstpas := False
9318  9329 Perf_Background_Dpkg.Psftpbwritok := False
9319  9330 Perf_Background_Dpkg.Psvsact := True
9320  9331 Perf_Background_Dpkg.Psfpaact := True
9321  9332 Perf_Background_Dpkg.Pslvlatbcalt := True
9322  9333 Perf_Integration_Dpkg.Pslvlblwpth := True
9323  9334 Perf_Background_Dpkg.Psfi_Possble := True
9324  9335 Perf_Background_Dpkg.On_Icao_Leg_Decel := True
9325  9336 Perf_Background_Dpkg.Psignorehm := True
9326  9337 Perf_Integration_Dpkg.Pcoldwspdchg := Icaolimited
9327  9338 Perf_Background_Dpkg.Adc_Fg_Valid  := False
9328  9339 Perf_Background_Dpkg.Psenginesoff := True
9329  9340 Perf_Dpkg.Pcdelspdrec.Predicted   := True
9330  9341 Perf_Background_Dpkg.Pcoldeconcas.Valid := True
9331  9342 #DELB/ALL
9332  9343
9333  9344 #sba Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt after_elab
9334  9345 #go
9335  9346 #define Get_Def_Thrust_Reduction_Alt_Called   := True
9336  9347
9337  9348 #sba Prf_External_Util_Pkg.Get_Maxop_Delta after_elab begin
9338  9349 #define Get_Maxop_Delta_Called   := True
9339  9350 #go
9340  9351 #end
9341  9352
9342  9353 -- to test local variables for PERF_SDD_4155_INT
9343       #sba prf_bkgnd_pkg.get_bk_Data  #575  
      9354 #sba prf_bkgnd_pkg.get_bk_Data  #581
9344  9355 #go
9345  9356 Computoldtgt = False
9346  9357 Curspdsval = True
9347       #delba prf_bkgnd_pkg.get_bk_Data #575
      9358 #delba prf_bkgnd_pkg.get_bk_Data #581
9348  9359
9349  9360 -- to test PERF_SDD_4155_INT
9350       #sba prf_bkgnd_pkg.get_bk_Data  #1466
      9361 #sba prf_bkgnd_pkg.get_bk_Data  #1473
9351  9362 #go
9352  9363 Perf_Background_Dpkg.Lim_Max_Op_Cas       := 5.0
9353  9364 Perf_Background_Dpkg.Lim_Max_Op_Mach      := 0.0
9354       #delba prf_bkgnd_pkg.get_bk_Data #1466
      9365 #delba prf_bkgnd_pkg.get_bk_Data #1473
9355  9366
9356  9367 #sba prf_bkgnd_pkg.get_bk_Data before_end
```

```
9357  9368 #go
9358  9369 Prf_Bkgnd_Pkg:body.Fgspdsvalid = True
9359  9370 Perf_Background_Dpkg.Psfirstpass = True
9360  9371 Perf_Background_Dpkg.Psonofrstpas = True
9361  9372 Perf_Background_Dpkg.Psftpbwritok = True
9362  9373 Perf_Background_Dpkg.Psvsact = False
9363  9374 Perf_Background_Dpkg.Psfpaact = False
9364  9375 Perf_Background_Dpkg.Pslvlatbcalt = False
9365  9376 Perf_Integration_Dpkg.Pslvlblwpth = False
9366  9377 Perf_Background_Dpkg.Psfi_Possble = False
9367  9378 Perf_Background_Dpkg.On_Icao_Leg_Decel = False
9368  9379 Perf_Background_Dpkg.Psignorehm = False
9369  9380 Perf_Integration_Dpkg.Pcoldwspdchg = Returntoecon
9370  9381 #DELB/ALL
9371  9382
9372  9383 !run_test()
9373  9384
9374  9385 -- OUTPUTS
9375  9386 Get_Def_Thrust_Reduction_Alt_Called = True
9376  9387 Perf_Background_Dpkg.Use_Clb_Autodrt = False
9377  9388 Perf_Dpkg.Potential_To_Kinetic_Share = 501.0
9378  9389 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass = TRUE
9379  9390 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid = TRUE
9380  9391 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data = 93.2
9381  9392 Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred = False
9382  9393 Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred = False
9383  9394 Perf_Background_Dpkg.Pcconfig = Perf_Config_Dpkg.Clean
9384  9395 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment = True
9385  9396 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol = 188.00
9386  9397 Perf_Background_Dpkg.Pcsavstepcas(Perf_Background_Dpkg.Pcactorsec) = 288.0
9387  9398 Perf_Background_Dpkg.Pcsavstepmac(Perf_Background_Dpkg.Pcactorsec) = 0.66
9388  9399 Perf_Background_Dpkg.Psinstep = True
9389  9400 Perf_Background_Dpkg.Psstepcas = 288.0
9390  9401 Perf_Background_Dpkg.Psstepmach = 0.66
9391  9402 Perf_Background_Dpkg.Psecncrzmach = 0.55
9392  9403 Perf_Background_Dpkg.Psecncrzcas = 265.0
9393  9404 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas =265.0
9394  9405 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach =0.55
9395  9406 Perf_Background_Dpkg.Psthredalt = 866.0
9396  9407 Perf_Background_Dpkg.Psdesthrdalt = 955.0
9397  9408 Get_Maxop_Delta_Called  = True
9398  9409 Perf_Background_Dpkg.Lim_Max_Op_Cas  = 0.0
9399  9410 Perf_Background_Dpkg.Lim_Max_Op_Mach  = 0.45
9400  9411 Perf_Background_Dpkg.Psgrndotdes = true
```

```
Perf_Background_Dpkg.Clralt_Below_Des_Spd_Lim_Decel_Start  = False
Perf_Background_Dpkg.Below_Path_Pred.Below_DSL_VS_Target  = -8.333

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 74

       the working flight plan is Copy_From_Active,
       a variety of following global data shall be retrieved which are common to the Active flight plan predictions pr
» ocess.
       - A/C is below a NAVDB imposed TDP segment (Below_Navdb_Imposed_Segment) from
       guidance
       - Guidance provided TDP capture tolerance
      - when the Engine out status and the VG indicator that Green-Dot Speed is latched,
        The flag indicating that VG is using latched Green-Dot descent speed is set.

      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
                   PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
                   PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

      the current flight phase is cruise
      the real time cruise speeds are not valid for current working flight plan and the real time
      step speeds are valid and a step (climb) is not active and a step (descent) is active , then:
      -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)

      the real time descent speeds are not valid for current working flight plan then
      Optimum Econ/LRC descent CAS and Mach shall not set to the real time descent CAS and Mach respectively.

       PERF_SDD_09064(PERF_SRD_23503_INT,PERF_SRD_2489)


-- INPUTS
Perf_Background_Dpkg.Use_Clb_Autodrt := True
Perf_Dpkg.Potential_To_Kinetic_Share := 200.0
Perf_Dpkg.Des_Potential_To_Kinetic_Share := 501.0
Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass := False
Perf_Background_Dpkg.Psfirstpass := False
Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid := False
Navigation_Data.Aircraft_Altitude_Valid := True
Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data := 100.00
Navigation_Data.Aircraft_Altitude := 93.20
Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred := True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
9443  9454 Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred := True
9444  9455 Perf_Background_Dpkg.Pcconfig := Perf_Config_Dpkg.Fidconfidx
9445  9456 Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd := True
9446  9457 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment := False
9447  9458 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol := 100.00
9448  9459 Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance  := 188.00
9449  9460 Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Copy_From_Active
9450  9461 Perf_Background_Dpkg.Pcactorsec := Active
9451  9462 Perf_Background_Dpkg.Pcfltphase := Cruise
9452  9463 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
9453  9464 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := False
9454  9465 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas := 265.0
9455  9466 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach := 0.55
9456  9467 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := True
9457  9468 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas := 288.0
9458  9469 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach := 0.66
9459  9470 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := False
9460  9471 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
9461  9472 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
9462  9473 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
9463  9474 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
9464  9475 Cdk_Vert_Dpkg:Body.Engine_Out_I := true
9465  9476 Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes := true
9466  9477 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True
9467  9478
9468  9479 --initial the output
9469       ~~#sba prf_bkgnd_pkg.get_bk_Data #1062~~
      9480 #sba prf_bkgnd_pkg.get_bk_Data #1069
9470  9481 #go
9471  9482 Prf_Bkgnd_Pkg:body.Fgspdsvalid := True
9472  9483
9473  9484 #sba prf_bkgnd_pkg.get_bk_Data before_end
9474  9485 #go
9475  9486 Prf_Bkgnd_Pkg:body.Fgspdsvalid = False
9476  9487
9477  9488 #delb/all
9478  9489 !run_test()
9479  9490
9480  9491 -- OUTPUTS
9481  9492 Perf_Background_Dpkg.Use_Clb_Autodrt = False
9482  9493 Perf_Dpkg.Potential_To_Kinetic_Share = 501.0
9483  9494 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass = TRUE
9484  9495 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid = TRUE
9485  9496 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data = 93.2
```

```
9486  9497 Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred = False
9487  9498 Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred = False
9488  9499 Perf_Background_Dpkg.Pcconfig = Perf_Config_Dpkg.Clean
9489  9500 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment = True
9490  9501 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol = 188.00
9491  9502
9492  9503 ------------------------------------------------------------------------------------------------------------------------
           » --
9493  9504 TESTID: 75
9494  9505
9495  9506       the current flight phase is cruise
9496  9507       the real time cruise speeds are valid for current working flight plan and the real time
9497  9508       step speeds are not valid and  a step (climb) is active and a step (descent) is not active , then:
9498  9509       -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.
9499  9510
9500  9511        PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
9501  9512
9502  9513
9503  9514 -- INPUTS
9504  9515 Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
9505  9516 Perf_Background_Dpkg.Pcactorsec := Active
9506  9517 Perf_Background_Dpkg.Pcfltphase := Cruise
9507  9518 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
9508  9519 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
9509  9520 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := False
9510  9521 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
9511  9522 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := True
9512  9523 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
9513  9524 Cdk_Vert_Dpkg:Body.Engine_Out_I := true
9514  9525 Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes := true
9515  9526 Prf_Bkgnd_Pkg:body.Fgspdsvalid := False
9516  9527 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True
9517  9528
9518  9529 --initial the output
9519       ~~#sba prf_bkgnd_pkg.get_bk_Data #1062~~
      9530 #sba prf_bkgnd_pkg.get_bk_Data #1069
9520  9531 #go
9521  9532 Prf_Bkgnd_Pkg:body.Fgspdsvalid := True
9522  9533
9523  9534 #sba prf_bkgnd_pkg.get_bk_Data before_end
9524  9535 #go
9525  9536 Prf_Bkgnd_Pkg:body.Fgspdsvalid = False
9526  9537 #delb/all
9527  9538
```

```
!run_test()

-- OUTPUTS

------------------------------------------------------------------------------------------------------------------------
» --
TESTID: 76
      Ihe current flight phase is cruise
      the real time cruise speeds are valid for current working flight plan and the real time
      step speeds are valid and a step (climb) is not active and a step (descent)  is not active, then:
      -The original step speeds (CAS and Mach) before speed limiting are set to the real
      time step speeds (CAS and Mach) respectively.
      -The flag indicating Predictions are in step is set based on the Step descent active
      flag from Guidance.
      -The Step CAS and Mach speeds are set to the real time step speeds CAS and Mach
      respectively.
      -Optimum Econ/LRC Cruise CAS and Mach are set to the real time cruise CAS and
      Mach speeds for the active flight plan.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Pcfltphase := Cruise
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach := 0.55
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas := 288.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach := 0.66
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec ) := 100.00
Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec ) := 0.12
Perf_Background_Dpkg.Psinstep := True
Perf_Background_Dpkg.Psstepcas := 200.00
Perf_Background_Dpkg.Psstepmach := 0.35
Perf_Background_Dpkg.Psecncrzmach :=200.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
9571  9582 Perf_Background_Dpkg.Psecncrzcas := 0.55
9572  9583 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 100.12
9573  9584 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.78
9574  9585 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True
9575  9586
9576  9587 --initial the output
9577       ~~#sba prf_bkgnd_pkg.get_bk_Data #1062~~
      9588 #sba prf_bkgnd_pkg.get_bk_Data #1069
9578  9589 #go
9579  9590 Prf_Bkgnd_Pkg:body.Fgspdsvalid := True
9580  9591
9581  9592 #sba prf_bkgnd_pkg.get_bk_Data before_end
9582  9593 #go
9583  9594 Prf_Bkgnd_Pkg:body.Fgspdsvalid = True
9584  9595
9585  9596 #delb/all
9586  9597 !run_test()
9587  9598
9588  9599 -- OUTPUTS
9589  9600 Perf_Background_Dpkg.Pcsavstepcas(Perf_Background_Dpkg.Pcactorsec) = 288.0
9590  9601 Perf_Background_Dpkg.Pcsavstepmac(Perf_Background_Dpkg.Pcactorsec) = 0.66
9591  9602 Perf_Background_Dpkg.Psinstep = False
9592  9603 Perf_Background_Dpkg.Psstepcas = 288.0
9593  9604 Perf_Background_Dpkg.Psstepmach = 0.66
9594  9605 Perf_Background_Dpkg.Psecncrzmach = 0.55
9595  9606 Perf_Background_Dpkg.Psecncrzcas = 265.0
9596  9607 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas =265.0
9597  9608 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach =0.55
9598  9609
9599  9610 -----------------------------------------------------------------------------------------------------------------------
           » --
9600  9611 TESTID: 77
9601  9612
9602  9613       the current flight phase is cruise
9603  9614       the real time cruise speeds are not valid for current working flight plan and the real time
9604  9615       step speeds are valid and a step (climb and descent) is active, then:
9605  9616       -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.
9606  9617
9607  9618        PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
9608  9619
9609  9620
9610  9621 -- INPUTS
9611  9622 Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active -- Perf_Int_Base_Tpkg.Copy_From_Active
9612  9623 Perf_Background_Dpkg.Pcactorsec := Active
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
 9613   9624 Perf_Background_Dpkg.Pcfltphase := Cruise
 9614   9625 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
 9615   9626 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := False
 9616   9627 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := True
 9617   9628 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
 9618   9629 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := True
 9619   9630 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
 9620   9631
 9621   9632 --initial the output
 9622        ~~#sba prf_bkgnd_pkg.get_bk_Data #1062~~
        9633 #sba prf_bkgnd_pkg.get_bk_Data #1069
 9623   9634 #go
 9624   9635 Prf_Bkgnd_Pkg:body.Fgspdsvalid := True
 9625   9636
 9626   9637 #sba prf_bkgnd_pkg.get_bk_Data before_end
 9627   9638 #go
 9628   9639 Prf_Bkgnd_Pkg:body.Fgspdsvalid = False
 9629   9640
 9630   9641 #delb/all
 9631   9642 !run_test()
 9632   9643
 9633   9644 -- OUTPUTS
 9634   9645
 9635   9646 ----------------------------------------------------------------------------------------------------------------------
             » --
 9636   9647 TESTID: 78
 9637   9648
 9638   9649       the current flight phase is cruise
 9639   9650       the real time cruise speeds are  valid for current working flight plan and the real time
 9640   9651       step speeds are not valid and a step (climb and descent) is active, then:
 9641   9652       -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.
 9642   9653
 9643   9654        PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
 9644   9655
 9645   9656
 9646   9657 -- INPUTS
 9647   9658 Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
 9648   9659 Perf_Background_Dpkg.Pcactorsec := Active
 9649   9660 Perf_Background_Dpkg.Pcfltphase := Cruise
 9650   9661 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
 9651   9662 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
 9652   9663 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := False
 9653   9664 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
 9654   9665 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := True
```

```
9655  9666 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
9656  9667
9657  9668 --initial the output
9658       ~~#sba prf_bkgnd_pkg.get_bk_Data #1062~~
      9669 #sba prf_bkgnd_pkg.get_bk_Data #1069
9659  9670 #go
9660  9671 Prf_Bkgnd_Pkg:body.Fgspdsvalid := True
9661  9672
9662  9673 #sba prf_bkgnd_pkg.get_bk_Data before_end
9663  9674 #go
9664  9675 Prf_Bkgnd_Pkg:body.Fgspdsvalid = False
9665  9676
9666  9677 #delb/all
9667  9678 !run_test()
9668  9679
9669  9680 -- OUTPUTS
9670  9681
9671  9682 ----------------------------------------------------------------------------------------------------------------------
           » --
9672  9683
9673  9684 TESTID: 79
9674  9685
9675  9686       the current flight phase is cruise
9676  9687       the real time cruise speeds are  valid for current working flight plan and the real time
9677  9688       step speeds are not valid and a step Climb is not active,descent is active then:
9678  9689       -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.
9679  9690
9680  9691        PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
9681  9692
9682  9693
9683  9694 -- INPUTS
9684  9695 Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
9685  9696 Perf_Background_Dpkg.Pcactorsec := Active
9686  9697 Perf_Background_Dpkg.Pcfltphase := Cruise
9687  9698 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
9688  9699 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
9689  9700 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := False
9690  9701 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
9691  9702 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
9692  9703 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
9693  9704
9694  9705 --initial the output
9695       ~~#sba prf_bkgnd_pkg.get_bk_Data #1062~~
      9706 #sba prf_bkgnd_pkg.get_bk_Data #1069
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
#go
Prf_Bkgnd_Pkg:body.Fgspdsvalid := True

#sba prf_bkgnd_pkg.get_bk_Data before_end
#go
Prf_Bkgnd_Pkg:body.Fgspdsvalid = False

#delb/all
!run_test()

-- OUTPUTS

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 80
      Ihe current flight phase is cruise
      the real time cruise speeds are valid for current working flight plan and the real time
      step speeds are valid and a step (climb) is active and a step (descent)  is not active, then:
      -The original step speeds (CAS and Mach) before speed limiting are set to the real
      time step speeds (CAS and Mach) respectively.
      -The flag indicating Predictions are in step is set based on the Step descent active
      flag from Guidance.
      -The Step CAS and Mach speeds are set to the real time step speeds CAS and Mach
      respectively.
      -Optimum Econ/LRC Cruise CAS and Mach are set to the real time cruise CAS and
      Mach speeds for the active flight plan.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Pcfltphase := Cruise
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach := 0.55
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas := 288.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach := 0.66
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
```

```
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := True
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := False
Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec ) := 100.00
Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec ) := 0.12
Perf_Background_Dpkg.Psinstep := True
Perf_Background_Dpkg.Psstepcas := 200.00
Perf_Background_Dpkg.Psstepmach := 0.35
Perf_Background_Dpkg.Psecncrzmach :=200.0
Perf_Background_Dpkg.Psecncrzcas := 0.55
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 100.12
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.78
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Pcsavstepcas(Perf_Background_Dpkg.Pcactorsec) = 288.0
Perf_Background_Dpkg.Pcsavstepmac(Perf_Background_Dpkg.Pcactorsec) = 0.66
Perf_Background_Dpkg.Psinstep = False
Perf_Background_Dpkg.Psstepcas = 288.0
Perf_Background_Dpkg.Psstepmach = 0.66
Perf_Background_Dpkg.Psecncrzmach = 0.55
Perf_Background_Dpkg.Psecncrzcas = 265.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas =265.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach =0.55

----------------------------------------------------------------------------------------------------------------------
» --
TESTID: 81
      Ihe current flight phase is cruise
      the real time cruise speeds are valid for current working flight plan and the real time
      step speeds are valid and a step (climb) is not active and a step (descent)  is active, then:
      -The original step speeds (CAS and Mach) before speed limiting are set to the real
      time step speeds (CAS and Mach) respectively.
      -The flag indicating Predictions are in step is set based on the Step descent active
      flag from Guidance.
      -The Step CAS and Mach speeds are set to the real time step speeds CAS and Mach
      respectively.
      -Optimum Econ/LRC Cruise CAS and Mach are set to the real time cruise CAS and
      Mach speeds for the active flight plan.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)


```

```
-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type := Perf_Int_Base_Tpkg.Is_Active
Perf_Background_Dpkg.Pcactorsec := Active
Perf_Background_Dpkg.Pcfltphase := Cruise
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase := Cruise
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach := 0.55
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas := 288.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach := 0.66
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid := True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas := 265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach := 0.55
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := False
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec ) := 100.00
Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec ) := 0.12
Perf_Background_Dpkg.Psinstep := True
Perf_Background_Dpkg.Psstepcas := 200.00
Perf_Background_Dpkg.Psstepmach := 0.35
Perf_Background_Dpkg.Psecncrzmach :=200.0
Perf_Background_Dpkg.Psecncrzcas := 0.55
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas := 100.12
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach := 0.78
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target  := True

!run_test()

-- OUTPUTS
Perf_Background_Dpkg.Pcsavstepcas(Perf_Background_Dpkg.Pcactorsec) = 288.0
Perf_Background_Dpkg.Pcsavstepmac(Perf_Background_Dpkg.Pcactorsec) = 0.66
Perf_Background_Dpkg.Psinstep = True
Perf_Background_Dpkg.Psstepcas = 288.0
Perf_Background_Dpkg.Psstepmach = 0.66
Perf_Background_Dpkg.Psecncrzmach = 0.55
Perf_Background_Dpkg.Psecncrzcas = 265.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas =265.0
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach =0.55

TESTID: 82

Verify the working flight plan is Is_Active, a variety of following global data shall be
retrieved which are common to the Active flight plan predictions process.
```

```
9826  9837 - Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
9827  9838    Data and Valid values respectively.
9828  9839 - Guidance provided PFD display speed and its validity.
9829  9840 PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
9830  9841                    PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
9831  9842                    PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
9832  9843
9833  9844
9834  9845 --Input
9835  9846
9836  9847 Perf_Background_Dpkg.Flight_Plan_Type := Is_Active
9837  9848
9838  9849 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data  := 0.0
9839  9850 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid := False
9840  9851
9841  9852 Guid_Spds_Dpkg.Pfd_Display_Speed.Valid   := True
9842  9853 Guid_Spds_Dpkg.Pfd_Display_Speed.Data    := 1.0
9843  9854 Perf_Background_Dpkg.Pfd_Display_Speed.Valid  := False
9844  9855 Perf_Background_Dpkg.Pfd_Display_Speed.Data   := 0.0
9845  9856 --verify the output
9846       ~~#sba prf_bkgnd_pkg.get_bk_Data #806~~
      9857 #sba prf_bkgnd_pkg.get_bk_Data #813
9847  9858 #go
9848  9859 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data  = 5.0
9849  9860 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid = True
9850       ~~#delba prf_bkgnd_pkg.get_bk_Data #806~~
      9861 #delba prf_bkgnd_pkg.get_bk_Data #813
9851  9862
9852  9863 !run_test()
9853  9864
9854  9865 -- OUTPUTS
9855  9866
9856  9867 Perf_Background_Dpkg.Pfd_Display_Speed.Valid  = True
9857  9868 Perf_Background_Dpkg.Pfd_Display_Speed.Data   = 1.0
9858  9869
9859  9870
9860  9871 TESTID: 83
9861  9872
9862  9873 Verify the working flight plan is Copy_From_Active, a variety of following global data shall be
9863  9874 retrieved which are common to the Active flight plan predictions process.
9864  9875 - Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
9865  9876    Data and Valid values respectively.
9866  9877 - Guidance provided PFD display speed and its validity.
9867  9878 In this case: the validity is false.
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
9868  9879 PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
9869  9880                    PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
9870  9881                    PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
9871  9882
9872  9883
9873  9884 --Input
9874  9885
9875  9886 Perf_Background_Dpkg.Flight_Plan_Type := Copy_From_Active
9876  9887
9877  9888 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data  := 0.0
9878  9889 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid := False
9879  9890
9880  9891 Guid_Spds_Dpkg.Pfd_Display_Speed.Valid   := False
9881  9892 Guid_Spds_Dpkg.Pfd_Display_Speed.Data    := 0.0
9882  9893 Perf_Background_Dpkg.Pfd_Display_Speed.Valid  := True
9883  9894 Perf_Background_Dpkg.Pfd_Display_Speed.Data   := 1.0
9884  9895 --verify the output
9885       ~~#sba prf_bkgnd_pkg.get_bk_Data #806~~
      9896 #sba prf_bkgnd_pkg.get_bk_Data #813
9886  9897 #go
9887  9898 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data  = 5.0
9888  9899 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid = True
9889       ~~#delba prf_bkgnd_pkg.get_bk_Data #806~~
      9900 #delba prf_bkgnd_pkg.get_bk_Data #813
9890  9901
9891  9902 !run_test()
9892  9903
9893  9904 -- OUTPUTS
9894  9905
9895  9906 Perf_Background_Dpkg.Pfd_Display_Speed.Valid  = False
9896  9907 Perf_Background_Dpkg.Pfd_Display_Speed.Data   = 0.0
9897  9908
9898  9909 TESTID: 84
9899  9910
9900  9911 Verify the working flight plan is Indep_From_Active,a variety of following global data be not retrieved
9901  9912      - A/C altitude and its validity
9902  9913      - A/C position
9903  9914      - A/C track and its validity
9904  9915      - A/C ground speed and its validity
9905  9916      - Wind bearing
9906  9917      - Wind magnitude
9907  9918      - Wind validity
9908  9919      - Health status of Engines (Inboard and Outboard Engines of Captain and FO)
9909  9920      - Throttle lever angle (Inboard and Outboard Engines of Captain and FO)
```

```
     - A/C flightphase
     - Clock time
     - FE maneuver speed and validity
     - Airborne flag
       when Io_Fms_Aircraft_State_Dpkg.Is_Airborne is true
       and Perf_Background_Dpkg.Pcfltphase is not Preflight and Done;
     - Lateral auto mode flag
     - Current aircraft cross track error from guidance.
     - Level change auto control mode flag
     - Vertical auto mode flag
     - Third altitude from guidance
     - Current altitude constraint management related data(Pccuraltcstr) from guidance
     - Previous captured barometric altitude related data (Pcprebcalt) from guidance
     - A/C is descending from level segment or alt constraint (Early_Descent_From_Level) from guidance
     - Engine-out flag
     - Engines off status
     - Number of engines out via Prf_Aeroeng_Pkg.Get_Num_Eng_Out
     -when Perf_Background_Dpkg.Pcpathref is not Onpath the descent path is not be captured
     - Cruise altitude from Fpln_Ext_Dpkg.Get_Cruise_Alt
     - Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
       Data and Valid values respectively.
     - when Sel_Src_Inertial_Vert_Speed is valid, A/C inertial vertical speed is Io_Common_Irs_Dpkg.Data
     - Speed mode from Guid_Ext_Dpkg.Va3vertmde
     - Active Speed Restriction Annunciation from Guid_Ext_Dpkg.Active_Speed_Restriction
     -  when Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Activeis valid, Altitude Hold mode flag status from FMGC via th
» e interface
     - Final descent mode flag from FMGC armed or active status via the interfaces
        Io_Fg_Fm_Internal_Dpkg.Final_Descent_Mode_Active.Data and
        Io_Fg_Fm_Internal_Dpkg.Final_Descent_Mode_Armed.Data
     - A/C configuration via Prf_Acstate_Pkg.Get_Ac_Config
     - A/C airbrake extension indicator to zero airbrake
     - Step climb & step descent active flags (Psstpclbact & Psstpdesact) are set from guidance.
     -  when the Engine out status and the VG indicator that Green-Dot Speed is not latched,
     then the flag indicating that VG is using latched Green-Dot descent speed is not set
    - Guidance provided PFD display speed and its validity when the valid is true.
     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
     PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
     PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)


--Input

Perf_Background_Dpkg.Flight_Plan_Type := Indep_From_Active
Perf_Background_Dpkg.Pcactorsec := Secondary
```

```
 9953  9964
 9954  9965 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
 9955  9966 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid := True
 9956  9967 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.20
 9957  9968 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data := 32.30
 9958  9969
 9959  9970 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data  := 0.0
 9960  9971 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid := False
 9961  9972
 9962  9973 Guid_Spds_Dpkg.Pfd_Display_Speed.Valid   := True
 9963  9974 Guid_Spds_Dpkg.Pfd_Display_Speed.Data    := 1.0
 9964  9975 Perf_Background_Dpkg.Pfd_Display_Speed.Valid  := False
 9965  9976 Perf_Background_Dpkg.Pfd_Display_Speed.Data   := 0.0
 9966  9977
 9967  9978 Perf_Background_Dpkg.Pcgmttime.Hour := 0
 9968  9979 Perf_Background_Dpkg.Pcgmttime.Minute := 0
 9969  9980 Perf_Background_Dpkg.Pcgmttime.Second := 0
 9970  9981 Perf_Background_Dpkg.Psairborne :=  True
 9971  9982 Perf_Background_Dpkg.Ac_Crosstrack_Error := 1.0
 9972  9983 Perf_Background_Dpkg.Psautolat := True
 9973  9984 Perf_Background_Dpkg.Psengout := True
 9974  9985 Perf_Background_Dpkg.Psenginesoff := True
 9975  9986 Perf_Background_Dpkg.Psvgonpath := True
 9976  9987 Perf_Integration_DPkg.Pcairbrakes := Fullab
 9977  9988 Perf_Background_Dpkg.Psstpclbact := False
 9978  9989 Perf_Background_Dpkg.Psstpdesact := False
 9979  9990 Perf_Background_Dpkg.Pcmanspd.Speed.CAS         := 1.0
 9980  9991 Perf_Background_Dpkg.Pcmanspd.CASVALID          := True
 9981  9992 Perf_Background_Dpkg.Pcmanspd.Speed.MACH        := 1.0
 9982  9993 Perf_Background_Dpkg.Pcmanspd.MACHVALID         := True
 9983  9994 Perf_Background_Dpkg.Pccuraltcstr.Data          := 1.0
 9984  9995 Perf_Background_Dpkg.Pccuraltcstr.Valid         := True
 9985  9996 Perf_Background_Dpkg.Pccuraltcstr.Legidx        := 1
 9986  9997 Perf_Background_Dpkg.Pccuraltcstr.Lgidval       := True
 9987  9998 Perf_Background_Dpkg.Pccuraltcstr.Usevga        := True
 9988  9999 Perf_Background_Dpkg.Pccuraltcstr.Vgaidx        := 1
 9989 10000 Perf_Background_Dpkg.Pcprebcalt.Data            := 1.0
 9990 10001 Perf_Background_Dpkg.Pcprebcalt.Valid           := True
 9991 10002 Perf_Background_Dpkg.Pc3rdalt.Data              := 1.0
 9992 10003 Perf_Background_Dpkg.Pc3rdalt.Valid             := True
 9993 10004 Perf_Background_Dpkg.Pslcautoctl                := True
 9994 10005 Perf_Background_Dpkg.Vert_Auto_Mode             := True
 9995 10006 Perf_Background_Dpkg.Early_Descent_From_Level   := False
 9996 10007 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment := False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
 9997  10008 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol := 1.0
 9998  10009 Perf_Background_Dpkg.Psinertvs := 0.0
 9999  10010 Perf_Background_Dpkg.Speed_Annunciation.Cas             := 0.0
10000  10011 Perf_Background_Dpkg.Speed_Annunciation.Alt             := 0.0
10001  10012 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  := Vg_Ext_Tpkg.Invalid
10002  10013 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       := "       "
10003  10014 Perf_Background_Dpkg.Altholdmode  := False
10004  10015 Perf_Background_Dpkg.Psgrndotdes  := False
10005  10016 Perf_Background_Dpkg.Vman_Fe.Data      := 1.0
10006  10017 Perf_Background_Dpkg.Vman_Fe.Valid     := True
10007  10018 Perf_Background_Dpkg.Pcspeedmode := Perf_Ext_Tpkg.Vmecon
10008  10019
10009  10020 Guid_Ext_Dpkg.Galxtk := 2.49
10010  10021 Fmcs_Partition_Data_Pkg.Ops_Time.Hour := 2
10011  10022 Fmcs_Partition_Data_Pkg.Ops_Time.Minute := 2
10012  10023 Fmcs_Partition_Data_Pkg.Ops_Time.Second := 2
10013  10024 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas := 330.0
10014  10025 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt := 15500.0
10015  10026 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type := Vg_Ext_Tpkg.Des_Spd_Lim
10016  10027 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident := "ABCDEFG"
10017  10028 --Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Active.Is_Valid & data
10018  10029 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3  := true
10019  10030 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active  :=
             » true
10020  10031 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engine_Healthy_1_Inboard := True
10021  10032 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.FRAME_40_Disc_Word_5 := True
10022  10033 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engine_Healthy_2_Inboard := True
10023  10034
10024  10035 Guid_Checkpoint_Resynch_Dpkg.Vc3Cstrduald.Isbdatablock.Cstraltlim := True
10025  10036 Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd := True
10026  10037 Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance  := 2.0
10027  10038 Guid_Ext_Dpkg.Va3Vertmde := Perf_Ext_Tpkg.Vmnone
10028  10039 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact := True
10029  10040 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact := True
10030  10041
10031  10042 #define Perf_Get_State_Pkg_Get_State_called := False
10032  10043 #define Fpln_Ext_Dpkg_Get_Flight_Phase_called := False
10033  10044 #define Prf_Aeroeng_Pkg_Get_Num_Eng_Out_called := False
10034  10045 #define Fpln_Ext_Dpkg_Get_Cruise_Alt_called := False
10035  10046 #define Prf_Acstate_Pkg_Get_Ac_Config_called := False
10036  10047
10037  10048 #sba Perf_Get_State_Pkg.Get_State af begin
10038  10049 #define Perf_Get_State_Pkg_Get_State_called := True
10039  10050 #go
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```
10040  10051 #end
10041  10052
10042  10053 #sba Fpln_Ext_Dpkg.Get_Flight_Phase af begin
10043  10054 #define Fpln_Ext_Dpkg_Get_Flight_Phase_called := True
10044  10055 #go
10045  10056 #end
10046  10057
10047  10058 #sba Prf_Aeroeng_Pkg.Get_Num_Eng_Out af begin
10048  10059 #define Prf_Aeroeng_Pkg_Get_Num_Eng_Out_called := True
10049  10060 #go
10050  10061 #end
10051  10062
10052  10063 #sba Fpln_Ext_Dpkg.Get_Cruise_Alt af begin
10053  10064 #define Fpln_Ext_Dpkg_Get_Cruise_Alt_called := True
10054  10065 #go
10055  10066 #end
10056  10067
10057  10068 #sba Prf_Acstate_Pkg.Get_Ac_Config af begin
10058  10069 #define Prf_Acstate_Pkg_Get_Ac_Config_called := True
10059  10070 #go
10060  10071 #end
10061  10072
10062  10073 --initial the output
10063        ~~#sba prf_bkgnd_pkg.get_bk_Data #575~~
       10074 #sba prf_bkgnd_pkg.get_bk_Data #581
10064  10075 #go
10065  10076 --Final_Des_Mode :=  False
10066  10077 --Final_Des_Armed := False
10067  10078 Eng_Healthy1_Inboard            := False
10068  10079 Eng_Healthy1_Outboard           := False
10069  10080 Eng_Healthy2_Inboard            := False
10070  10081 Eng_Healthy2_Outboard           := False
10071  10082 Tla_Ecu1_Inboard.Data           := 0.0
10072  10083 Tla_Ecu1_Inboard.Valid          := False
10073  10084 Tla_Ecu1_Outboard.Data          := 1.0
10074  10085 Tla_Ecu1_Outboard.Valid         := True
10075  10086 Tla_Ecu2_Inboard.Data           := 0.0
10076  10087 Tla_Ecu2_Inboard.Valid          := False
10077  10088 Tla_Ecu2_Outboard.Data          := 1.0
10078  10089 Tla_Ecu2_Outboard.Valid         := True
10079        ~~#delba prf_bkgnd_pkg.get_bk_Data #575~~
       10090 #delba prf_bkgnd_pkg.get_bk_Data #581
10080  10091
10081  10092 --verify the output
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

10082		~~#sba prf_bkgnd_pkg.get_bk_Data #1323~~
	10093	#sba prf_bkgnd_pkg.get_bk_Data #1330
10083	10094	#go
10084	10095	Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data = 0.0
10085	10096	Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid = False
10086	10097	--Final_Des_Mode = False
10087	10098	--Final_Des_Armed = False
10088	10099	Eng_Healthy1_Inboard = False
10089	10100	Eng_Healthy1_Outboard = False
10090	10101	Eng_Healthy2_Inboard = False
10091	10102	Eng_Healthy2_Outboard = False
10092	10103	Tla_Ecu1_Inboard.Data = 0.0
10093	10104	Tla_Ecu1_Inboard.Valid = False
10094	10105	Tla_Ecu1_Outboard.Data = 1.0
10095	10106	Tla_Ecu1_Outboard.Valid = True
10096	10107	Tla_Ecu2_Inboard.Data = 0.0
10097	10108	Tla_Ecu2_Inboard.Valid = False
10098	10109	Tla_Ecu2_Outboard.Data = 1.0
10099	10110	Tla_Ecu2_Outboard.Valid = True
10100	10111	Fpln_Ext_Dpkg_Get_Cruise_Alt_called = False
10101	10112	Perf_Background_Dpkg.Psairborne = True
10102	10113	Perf_Background_Dpkg.Ac_Crosstrack_Error = 1.0
10103	10114	Perf_Background_Dpkg.Pccuraltcstr.Valid = True
10104	10115	Perf_Background_Dpkg.Pcprebcalt.Valid = True
10105	10116	Perf_Integration_DPkg.Pcairbrakes = Fullab
10106	10117	Perf_Background_Dpkg.Psengout = True
10107		~~#delba prf_bkgnd_pkg.get_bk_Data #1323~~
	10118	#delba prf_bkgnd_pkg.get_bk_Data #1330
10108	10119	
10109	10120	!run_test()
10110	10121	
10111	10122	-- OUTPUTS
10112	10123	
10113	10124	Perf_Background_Dpkg.Pfd_Display_Speed.Valid = False
10114	10125	Perf_Background_Dpkg.Pfd_Display_Speed.Data = 0.0
10115	10126	Perf_Get_State_Pkg_Get_State_called = False
10116	10127	Fpln_Ext_Dpkg_Get_Flight_Phase_called = False
10117	10128	Prf_Aeroeng_Pkg_Get_Num_Eng_Out_called = False
10118	10129	Prf_Acstate_Pkg_Get_Ac_Config_called = False
10119	10130	Perf_Background_Dpkg.Pcgmttime.Hour = 0
10120	10131	Perf_Background_Dpkg.Pcgmttime.Minute = 0
10121	10132	Perf_Background_Dpkg.Pcgmttime.Second = 0
10122	10133	Perf_Background_Dpkg.Vman_Fe.Data = 1.0
10123	10134	Perf_Background_Dpkg.Vman_Fe.Valid = True

```
10124  10135 Perf_Background_Dpkg.Psautolat         = True
10125  10136 Perf_Background_Dpkg.Psenginesoff      = True
10126  10137 Perf_Background_Dpkg.Pc3rdalt.Data     = 1.0
10127  10138 Perf_Background_Dpkg.Pc3rdalt.Valid    = True
10128  10139 Perf_Background_Dpkg.Pslcautoctl       = True
10129  10140 Perf_Background_Dpkg.Vert_Auto_Mode    = True
10130  10141 Perf_Background_Dpkg.Pccuraltcstr.Data    = 1.0
10131  10142 Perf_Background_Dpkg.Pccuraltcstr.Legidx  = 1
10132  10143 Perf_Background_Dpkg.Pccuraltcstr.Lgidval = True
10133  10144 Perf_Background_Dpkg.Pccuraltcstr.Usevga  = True
10134  10145 Perf_Background_Dpkg.Pccuraltcstr.Vgaidx  = 1
10135  10146 Perf_Background_Dpkg.Pcprebcalt.Data      = 1.0
10136  10147 Perf_Background_Dpkg.Early_Descent_From_Level   = False
10137  10148 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment = False
10138  10149 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol = 1.0
10139  10150 Perf_Background_Dpkg.Psvgonpath = True
10140  10151 Perf_Background_Dpkg.Psinertvs = 0.0
10141  10152 Perf_Background_Dpkg.Pcspeedmode = Perf_Ext_Tpkg.Vmecon
10142  10153 Perf_Background_Dpkg.Speed_Annunciation.Cas             = 0.0
10143  10154 Perf_Background_Dpkg.Speed_Annunciation.Alt             = 0.0
10144  10155 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type  = Vg_Ext_Tpkg.Invalid
10145  10156 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident       = "       "
10146  10157 Perf_Background_Dpkg.Altholdmode  = False
10147  10158 Perf_Background_Dpkg.Psstpclbact = False
10148  10159 Perf_Background_Dpkg.Psstpdesact = False
10149  10160 Perf_Background_Dpkg.Psgrndotdes = False
10150  10161
10151  10162 ---------------------------------------------------------------------------------------------
10152  10163 TESTID: 85
10153  10164
10154  10165 if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
10155  10166 Approach, then the Optimum Descent speeds shall be set as follows:
10156  10167 if the following are true:
10157  10168   - VG Partially-Limited CAS is non-zero, and Any of the following are true:
10158  10169     - The A/C is currently in a deceleration, and either:
10159  10170       - The predictions count is less than or equal to one, or
10160  10171       - The current working flight plan is Active and the difference between the current prediction sequence
10161  10172       counter and starting prediction sequence counter is less than or equal to 2, or
10162  10173       - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
10163  10174       being processed is Current Mode predictions(Normal or High Priority) ,or
10164  10175       - First Preds After Insert Temporary indication is True;
10165  10176     - The A/C is not in Auto Lateral mode,
10166  10177     - Approach Speeds have been latched.
10167  10178 then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and current working flight plan is Active and First Tactical Preds indicatio
» n
-- is True and the itinerary being processed is Current Mode predictions(Normal)
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Dpkg.Psfrstactprd                                   := True
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0
Perf_Background_Dpkg.Pcitin.Itinerary                    := Current_Mode_Preds

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  5.0

---------------------------------------------------------------------------------------------
TESTID: 86

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and current working flight plan is Active and First Tactical Preds indicatio
» n
-- is True and the itinerary being processed is Current Mode predictions(High Priority)
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Dpkg.Psfrstactprd                                   := True
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0
Perf_Background_Dpkg.Pcitin.Itinerary                    := Current_Mode_Hi_Pri

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  5.0
```

```

---------------------------------------------------------------------------------------------
TESTID: 87

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is not currently in a deceleration and First Preds After Insert Temporary indication is True.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := False
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := True
```

```
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  345.0

---------------------------------------------------------------------------------------------
TESTID: 88

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and predictions count is less than one.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
```

```
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 0
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  5.0

---------------------------------------------------------------------------------------------
TESTID: 89

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and predictions count is greater than one.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
```

```
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  345.0

---------------------------------------------------------------------------------------------
TESTID: 90

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and The current working flight plan is Temporary and the difference
-- between the current prediction sequence counter and starting prediction sequence counter is equal to 2.
-- Optimum Descent CAS is set to current VG CAS target.
```

```

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Temporary
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Temporary)              := 3
Perf_Background_Dpkg.Active_Start_Predcount              := 1
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  345.0

---------------------------------------------------------------------------------------------
TESTID: 91

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and The current working flight plan is Active and the difference
-- between the current prediction sequence counter and starting prediction sequence counter is less than 2.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Background_Dpkg.Active_Start_Predcount              := 2
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  5.0

---------------------------------------------------------------------------------------------
TESTID: 92

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and The current working flight plan is Active and the difference
-- between the current prediction sequence counter and starting prediction sequence counter is greater than 2.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Background_Dpkg.Active_Start_Predcount              := 0
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  345.0

---------------------------------------------------------------------------------------------
```

```
TESTID: 93

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and current working flight plan is Temporary and First Tactical Preds
-- indication is True and the itinerary being processed is Current Mode predictions(Normal)
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Temporary
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Temporary)              := 3
Perf_Dpkg.Psfrstactprd                                   := True
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0
```

```
Perf_Background_Dpkg.Pcitin.Itinerary                    := Current_Mode_Preds

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  345.0

---------------------------------------------------------------------------------------------
TESTID: 94

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and current working flight plan is Active and First Tactical Preds
-- indication is False and the itinerary being processed is Current Mode predictions(Normal)
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
```

```
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0
Perf_Background_Dpkg.Pcitin.Itinerary                    := Current_Mode_Preds

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  345.0

---------------------------------------------------------------------------------------------
TESTID: 95

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and First Preds After Insert Temporary indication is False.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A

```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TDF (continued)

```

-- INPUTS
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                := 0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase        := Descent
Perf_Background_Dpkg.Pcfltphase                          := Descent
Perf_Background_Dpkg.Pcactorsec                          := Active
Guid_Spds_Dpkg.Vc3prtlimcas                              := 5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply          := True
Perf_Background_Dpkg.Psautolat                           := True
Guid_Ext_Dpkg.Gcxxlatautoc                               := True
Perf_Background_Dpkg.Psappspdlat                         := False
Perf_Background_Dpkg.Pcpredcount(Active)                 := 3
Perf_Dpkg.Psfrstactprd                                   := False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds                          := False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data                       := 345.0

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                =  345.0

---------------------------------------------------------------------------------------------
TESTID: 96

The flag indicating Vertical Guidance is onpath or capturing Descent Path(Perf_Background_Dpkg.Psvgonpath) shall be se
» t to true,
if all of the following conditions are satisfied:
  - Level change auto control mode is engaged.
  - The descent path reference is set to Onpath.
  - The current working flight plan is Active.
-- In this case,
-- Level change auto control mode is engaged.
-- The descent path reference is set to Onpath.
-- The current working flight plan is Active.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_09201_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                   := Is_Active
Guid_Ext_Dpkg.Va3lcautoctl                              := True
Perf_Background_Dpkg.Pcpathref                          := Onpath
Perf_Background_Dpkg.Pcactorsec                         := Active
Perf_Background_Dpkg.Psvgonpath                         := False
Guid_Ext_Dpkg.Va3pathref                                := Onpath
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase       := Descent

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Psvgonpath                          = True

---------------------------------------------------------------------------------------------
TESTID: 97

The flag indicating Vertical Guidance is onpath or capturing Descent Path(Perf_Background_Dpkg.Psvgonpath) shall be se
» t to true,
if all of the following conditions are satisfied:
  - Level change auto control mode is engaged.
  - The descent path reference is set to Onpath.
  - The current working flight plan is Active.
-- In this case,
-- Level change auto control mode is not engaged.
-- The descent path reference is set to Onpath.
-- The current working flight plan is Active.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_09201_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                   := Is_Active
Guid_Ext_Dpkg.Va3lcautoctl                              := False
Perf_Background_Dpkg.Pcpathref                          := Onpath
Perf_Background_Dpkg.Pcactorsec                         := Active
Perf_Background_Dpkg.Psvgonpath                         := True
Guid_Ext_Dpkg.Va3pathref                                := Onpath
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase       := Descent

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Psvgonpath                          = False

---------------------------------------------------------------------------------------------
```

```
TESTID: 98

The flag indicating Vertical Guidance is onpath or capturing Descent Path(Perf_Background_Dpkg.Psvgonpath) shall be se
» t to true,
if all of the following conditions are satisfied:
  - Level change auto control mode is engaged.
  - The descent path reference is set to Onpath.
  - The current working flight plan is Active.
-- In this case,
-- Level change auto control mode is engaged.
-- The descent path reference is set to Nopath.
-- The current working flight plan is Active.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_09201_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                   := Is_Active
Guid_Ext_Dpkg.Va3lcautoctl                              := True
Perf_Background_Dpkg.Pcpathref                          := Nopath
Perf_Background_Dpkg.Pcactorsec                         := Active
Perf_Background_Dpkg.Psvgonpath                         := True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase       := Cruise

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Psvgonpath                          = False

---------------------------------------------------------------------------------------------
TESTID: 99

The flag indicating Vertical Guidance is onpath or capturing Descent Path(Perf_Background_Dpkg.Psvgonpath) shall be se
» t to true,
if all of the following conditions are satisfied:
  - Level change auto control mode is engaged.
  - The descent path reference is set to Onpath.
  - The current working flight plan is Active.
-- In this case,
-- Level change auto control mode is engaged.
-- The descent path reference is set to Onpath.
-- The current working flight plan is Secondary.
```

```

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_09201_INT

    SUPPORTING REQUIREMENTS : N/A


-- INPUTS
Perf_Background_Dpkg.Flight_Plan_Type                   := Is_Active
Guid_Ext_Dpkg.Va3lcautoctl                              := True
Perf_Background_Dpkg.Pcpathref                          := Onpath
Perf_Background_Dpkg.Pcactorsec                         := Secondary
Perf_Background_Dpkg.Psvgonpath                         := True
Guid_Ext_Dpkg.Va3pathref                                := Onpath
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase       := Descent

!run_test()
-- OUTPUTS

Perf_Background_Dpkg.Psvgonpath                          = False

---------------------------------------------------------------------------------------------
```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TRT

```
!*******************************************************************************************************
!*
!* TRACE FILENAME        :CTP_A350_PERF_BKGND_GET_BK_DATA.TRT
!*
!* MODIFICATION HISTORY  :
!*                          DATE          SCR #       AUTHOR              DESCRIPTION
!*                          =====         =====       ======              ===========
!*
!*                       1-Aug-2011      1991.91     Bao Tingjie        Updated for A350 S1 Baseline on build A01082.
!*                                                                    1.Re-used trace file from A380 Cert2 and Updated
»  as
!*                                                                      A350 standards
!*                                                                    2.Deleted the following anchors PERF_SDD_08116_I
» NT,
!*                                                                      PERF_SDD_07539_INT,PERF_SDD_07541_INT,PERF_SDD
» _2248
!*                                                                      and PERF_SRD_6015
!*                                                                    3.Added the following anchors PERF_SDD_08171_INT
» ,
!*                                                                      PERF_SDD_08225_INT,PERF_SDD_08227_INT,PERF_SDD
» _08226,
!*                                                                      PERF_SRD_23387 and PERF_SRD_23549
!*
!*                       DEC-25-2011     3149.08     Hao Zhilian       Updated for A350 S1.1 on build A01187.
!*                                                                    1.Added SRD anchor PERF_SRD_23775 as per SCR 875
» .15.
!*                                                                    2.Added SDD anchor PERF_SDD_08665、PERF_SDD_0866
» 6 and
!*                                                                      PERF_SDD_08667 as per SCR 875.16.
!*                                                                    3.Added SDD anchor PERF_SDD_08588_INT as per SCR
»  391.01.
!*                                                                    4.Deleted SDD anchor PERF_SDD_3731_INT as per SC
» R 494.01.
!*
!*                       Feb-19-2012     3149.08     Hao Zhilian       Reworked for A350 S1.1 on build A01187.
!*                                                                    1.Added SRD anchor PERF_SRD_23774 as per SCR 875
» .15.
!*
!*                       3-July-2012     4418.03      Sun Likun       Updated for A350 S2 Baseline on bulid A01256.
!*                                                                    1.Added PERF_SRD_23964, PERF_SRD_23965,
!*                                                                      and PERF_SRD_24100 under SCR 2889.04.
!*
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TRT (continued)

```
  33   33 !*                      20-Nov-2012     5391.10      Dun Qing         Updated for A350 S2 on build A01283.
  34   34 !*                                                                  1. Updated as per 3652.00
  35   35 !*                                                                     A. Added following SRD anchor:
  36   36 !*                                                                      PERF_SRD_2801, PERF_SRD_23365, PERF_SRD_23455,
  37   37 !*                                                                      PERF_SRD_23478, PERF_SRD_23491,PERF_SRD_23503_I
          » NT,
  38   38 !*                                                                      PERF_SRD_2489
  39   39 !*                                                                     B. Added following SDD anchor:
  40   40 !*                                                                      PERF_SDD_09063, PERF_SDD_09064
  41   41 !*
  42   42 !*                      17-Jul-2013     7226.01      Jiang Xiaomin      Updated for A350 S3 on build A01344.
  43   43 !*                                                                      1.Added the anchor PERF_SRD_6005_INT as per scr
          » 3184.01.
  44   44 !*
  45   45 !*                      11-Sep-2013     7854.01      Ye Lin             Updated for A350 S3 on build A01365.
  46   46 !*                                                                      1. Changed PERF_SDD_07540_INT to PERF_SDD_07540
          »  as per scr 7708.01.
  47   47 !*
  48   48 !*                      14-Oct-2013     7854.01      Ye Lin             Rework after HTSC inspection.
  49   49 !*                                                                      1. Modified the previous history.
  50   50 !*
  51   51 !*                      15-Oct-2013     7854.01      Ye Lin             Rework after self-review.
  52   52 !*                                                                      1. Deleted PERF_SRD_10721 because it do not nee
          » d to be tested here.
  53   53 !*
       54 !*                      26-Dec-2013     8073.01      Lin Ye             Updated for A350 phase 5 on build A01418.
       55 !*                                                                      1. Updated as per SCR# 8053.01:
       56 !*                                                                       A. Added PERF_SDD_09201_INT.
       57 !*
  54   58 !*************************************************************************************************************************
          » ************
  55   59 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_0409
  56   60 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_0410
  57   61 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_0412_INT
  58   62 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_0417_INT
  59   63 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_0418_INT
  60   64 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_2123_INT
  61   65 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_2174_INT
  62   66 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_2177_INT
  63   67 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_2249_INT
  64   68 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_2276_INT
  65   69 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_2293_INT
  66   70 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_2852_INT
  67   71 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_2853_INT
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TRT (continued)

```
  68    72 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3053_INT
  69    73 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3055_INT
  70    74 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3105
  71    75 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3317_INT
  72    76 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3482_INT
  73    77 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3681_INT
  74    78 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3682_INT
  75    79 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3718
  76    80 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3746_INT
  77    81 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3887
  78    82 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_4155_INT
  79    83 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_4327
  80    84 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_4328
  81    85 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_4339
  82    86 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_5607_INT
  83    87 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_5608_INT
  84    88 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_5609_INT
  85    89 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_5610_INT
  86    90 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_5611_INT
  87    91 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07160_INT
  88    92 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07169_INT
  89    93 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07188_INT
  90    94 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07496_INT
  91    95 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07495_INT
  92    96 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07497_INT
  93    97 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07498_INT
  94    98 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07499_INT
  95    99 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07500_INT
  96   100 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07501_INT
  97   101 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07502_INT
  98   102 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07503_INT
  99   103 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07504_INT
 100   104 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07505_INT
 101   105 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07506
 102   106 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07540
 103   107 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07542_INT
 104   108 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07543_INT
 105   109 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07544_INT
 106   110 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07545_INT
 107   111 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07546_INT
 108   112 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07547_INT
 109   113 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07548_INT
 110   114 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_07549
 111   115 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_4778_INT
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.TRT (continued)

```
 112 |  116 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_4779_INT
 113 |  117 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_4780_INT
 114 |  118 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_4794_INT
 115 |  119 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_4795
 116 |  120 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_4796
 117 |  121 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_09064
 118 |  122 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_09063
 119 |  123 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_07919
 120 |  124 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_07956
 121 |  125 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08158_INT
 122 |  126 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08159_INT
 123 |  127 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08171_INT
 124 |  128 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08225_INT
 125 |  129 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08227_INT
 126 |  130 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08226
 127 |  131 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08665
 128 |  132 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08666
 129 |  133 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08667
 130 |  134 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_08588_INT
     |  135 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_09201_INT
 131 |  136 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_23775
 132 |  137 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_23774
 133 |  138 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_10166_INT
 134 |  139 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_10167_INT
 135 |  140 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_10168_INT
 136 |  141 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_10198_INT
 137 |  142 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_10200_INT
 138 |  143 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_12371_INT
 139 |  144 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_1554_A3XX
 140 |  145 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_1919
 141 |  146 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_6057
 142 |  147 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_8964_INT
 143 |  148 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_8976_INT
 144 |  149 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_5585
 145 |  150 | A350    SDD     A350_PERF_TEST_2401    PERF_SDD_4600
 146 |  151 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_6012
 147 |  152 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_10199_INT
 148 |  153 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_1490_INT
 149 |  154 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_12437
 150 |  155 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_12370_INT
 151 |  156 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_12404
 152 |  157 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_1592
 153 |  158 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_12529_INT
 154 |  159 | A350    SRD     A350_PERF_TEST_2401    PERF_SRD_12507_DR
 155   160 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12511_DR
 156   161 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12514_DR
 157   162 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12517_DR
 158   163 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12520_DR
 159   164 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12523_DR
 160   165 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12530_INT
 161   166 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_1584_A3XX
 162   167 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12409_INT
 163   168 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_1590
 164   169 A350    SDD    A350_PERF_TEST_2401   PERF_SDD_3888_INT
 165   170 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_1358
 166   171 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_9587
 167   172 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_9656_INT
 168   173 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_6192
 169   174 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12641
 170   175 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12667_INT
 171   176 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12668_INT
 172   177 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12669_INT
 173   178 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12670_INT
 174   179 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12671_INT
 175   180 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12672_INT
 176   181 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_12673_INT
 177   182 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23387
 178   183 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23549
 179   184 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23964
 180   185 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23965
 181   186 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_24100
 182   187 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_2489
 183   188 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23503_INT
 184   189 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23491
 185   190 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23478
 186   191 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23455
 187   192 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_23365
 188   193 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_2801
 189   194 A350    SRD    A350_PERF_TEST_2401   PERF_SRD_6005_INT
 190   195
```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_BK_DATA.BAT

```
ECHO OFF
REM
REM    BAT File
REM
REM    CTP_A350_PERF_BKGND_GET_BK_DATA.BAT
REM
REM CTP_A350_PERF_BKGND_GET_BK_DATA Started Execution
ECHO ON
ECHO Building Library
%build_lib% A350 %test% fm2
ECHO Compiling Drv
%acomp% CTP_A350_PERF_BKGND_GET_BK_DATA_D.ADA
ECHO Compiling Stb
%acomp% CTP_A350_PERF_SPEED_LIMIT_TO_ENVELOPE.STB
%acomp% CTP_A350_PERF_BKGND_GET_GB_DATA.STB
%acomp% CTP_A350_PERF_BKGND_GET_KY_DATA.STB
%acomp% CTP_A350_PERF_BKGND_GET_PB_DATA.STB
%acomp% CTP_A350_PERF_ADS_INTERFACE.STB
%acomp% CTP_A350_PERF_FPLN_EXT_DPKG.STB
%acomp% CTP_A350_PERF_PUTHETADEL.STB
%acomp% CTP_A350_PERF_GET_AC_CONFIG.STB
%acomp% CTP_A350_PERF_GET_STATE_PKG.STB
%acomp% CTP_A350_IO_ADC_DPKG.STB
%acomp% CTP_A350_PERF_CLIMB_AUTODRT.STB
%acomp% CTP_A350_PERF_PERF_EXT_DESPATH.STB
%acomp% CTP_A350_PERF_BUFFER.STB
%acomp% CTP_A350_Io_Engine_Data_Dpkg.STB
%acomp% CTP_A350_PERF_IO_FMS_AIRCRAF.STB
ECHO Compiling CTP_A350_PERF_COMMON_OBJECTS.c
%ccomp% CTP_A350_PERF_COMMON_OBJECTS.c
ECHO recompiling
%recomp%
ECHO Linking
%alink% CTP_A350_PERF_BKGND_GET_BK_DATA_d
ECHO Running
%runtgs% CTP_A350_PERF_BKGND_GET_BK_DATA Y
ECHO CTP_A350_PERF_BKGND_GET_BK_DATA Completed Execution
```

Mode: All Lines

File: recompile.BAT

```
     1      1 rem
     2      2 rem
     3      3 rem    BAT File
     4      4 rem
     5      5 rem    RECOMPILE.BAT
     6      6 rem recompile
     7      7
     8      8
     9      9 a29_recompile/noall_units/progress/nokeep/noexecute/config=%a29_config%/scope=global
    10     10 echo off
    11     11
    12     12 echo on
    13     13 recomp
```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_BK_DATA.CUL

```
     1      1 ##
     2      2 ##    CUL FILE
     3      3 ##
     4      4 ##    CTP_A350_PERF_BKGND_GET_BK_DATA.CUL
     5      5 PRF_BKGND_PKG.GET_BK_DATA
```

Beyond Compare 2.1.1

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_BK_DATA_D.ADA

```
--
--    A350 COMPONENT TEST DRIVER
--
--    COMPONENT : CTP_A350_PERF_BKGND_GET_BK_DATA_D.ADA
--
--
with Base_Domain_Services_Tpkg;
with Portable_Types_Pkg;
with Perf_Buffer_Types;
package CTP_A350_PERF_BKGND_GET_BK_DATA is

-- Global test variables go here
  Envelope_Exec : Boolean;
  Get_Gb_Data_Exec : Boolean;
  Get_Ky_Data_Exec : Boolean;
  Get_Pb_Data_Exec : Boolean;
  Get_Requested_Num_Waypoints_Exec : Boolean;
  Sync_Flight_Phase : Base_Domain_Services_Tpkg.Flight_Phase_Type;
  Data_set          : Boolean;
  Data_set_valid    : Boolean;
  Requested_num_Waypoints : Portable_Types_Pkg.Natural_32;
  Pgvdespath_Exec : Boolean;

  CTP_Woendalt    :Portable_Types_Pkg.Float_32;
  CTP_Wos         :Portable_Types_Pkg.Float_32;
  CTP_Dtflex      :Portable_Types_Pkg.Float_32;
  CTP_Getperfleg_EXE : Boolean;
  CTP_Perfleg     :Perf_Buffer_Types.Perflegrec;

  Sel_Anti_Ice_Data : Boolean;
  Sel_Wing_Anti_Ice_Data : Boolean;
  Sel_Eng_Anti_Ice_Data  : Boolean;
  Sel_Air_Cond_Data  : Boolean;
  Is_Valid : Boolean;
  CTP_Psacalt :Portable_Types_Pkg.Float_32;
  Airborne_valid :Boolean;
  Airborne_status :Boolean;

  Parameter_Data : Portable_Types_Pkg.Float_32;
  Parameter_Valid : Boolean;

end CTP_A350_PERF_BKGND_GET_BK_DATA;
```

```

with Prf_Bkgnd_Pkg;
use Prf_Bkgnd_Pkg;


with CTP_A350_PERF_BKGND_GET_BK_DATA;
use CTP_A350_PERF_BKGND_GET_BK_DATA;

with Io_Adc_Dpkg;

procedure CTP_A350_PERF_BKGND_GET_BK_DATA_d is

begin

  Io_Adc_Dpkg.Baro_Corr_Alt.Put(Parameter_Data, Parameter_Valid);
  Prf_Bkgnd_Pkg.Get_Bk_Data;
  <<testend>>  NULL;
end CTP_A350_PERF_BKGND_GET_BK_DATA_d;
```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rpt

1	1	##
2	2	# #
3	3	# Test Coverage Analyzer #
4	4	# Short Summary Coverage Report #
5	5	# #
6	6	##
7	7	
8		~~Tue Oct 15 13:24:11 China Standard Time 2013~~
	8	Thu Dec 26 16:26:59 China Standard Time 2013
9	9	
10	10	Test Coverage Analyzer (TCA) V6.14 CLASS A ps4082880-122
11	11	Win32 Host: WinNT 6.1 Build 7601 UserID: E828804 Node: CH71DT8QL763X (Intel PentPro Model 42 Step 7)
12		~~Current Dir: C:\A350_Work\20130716\CTP_A350_PERF_BKGND_GET_BK_DATA(Rework)~~
	12	Current Dir: C:\A350_Work\S4P51418\CTP_A350_PERF_BKGND_GET_BK_DATA
13	13	
14	14	--
15		~~TCA invoked Tue Oct 15 13:23:56 China Standard Time 2013 with command line:~~
	15	TCA invoked Thu Dec 26 16:26:42 China Standard Time 2013 with command line:
16	16	tca.exe -TABS -r CTP_A350_PERF_BKGND_GET_BK_DATA.rpt -type 3 -p ...
17	17	CTP_A350_PERF_BKGND_GET_BK_DATA_d.pth -x ...
18	18	CTP_A350_PERF_BKGND_GET_BK_DATA.xin -c ...
19	19	CTP_A350_PERF_BKGND_GET_BK_DATA.cul
20	20	--
21	21	Expanded command line:
22	22	tca.exe -TABS -r CTP_A350_PERF_BKGND_GET_BK_DATA.rpt -type 3 -p ...
23	23	CTP_A350_PERF_BKGND_GET_BK_DATA_d.pth -x ...
24	24	CTP_A350_PERF_BKGND_GET_BK_DATA.xin -c ...
25	25	CTP_A350_PERF_BKGND_GET_BK_DATA.cul
26	26	--
27	27	
28	28	
29	29	Test Coverage Type: 3
30	30	
31	31	Report File Name : CTP_A350_PERF_BKGND_GET_BK_DATA.rpt
32	32	
33	33	Paths file(s) :
34	34	
35		~~(P01) CTP_A350_PERF_BKGND_GET_BK_DATA_d.pth Tue Oct 15 12:49:28 2013~~
	35	(P01) CTP_A350_PERF_BKGND_GET_BK_DATA_d.pth Thu Dec 26 15:52:45 2013
36	36	HADS-290x0 (PC/Windows NT) Ada Compiler, Version 2.9, PS4078711-104
37	37	HADS-290x0 (PC/Windows NT) Ada Compiler, Version 2.9.61, PS4082845-107
38	38	Post Object Paths Processor (POPP), v1.6, ps4082858-107

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rpt (continued)

```
 39  39              Honeywell 29K Assembler, V2.4, PS4072677-105
 40  40              Post Object Paths Processor (POPP), v1.3, ps4082858-104
 41  41              HADS-290x0 (PC/Windows NT) Ada Linker, Version 2.9.61, PS4082846-109
 42  42
 43  43 XInfo file(s)   Test Date   Test Platform:
 44  44
 45  45   (P01) CTP_A350_PERF_BKGND_GET_BK_DATA_d.pth
 46     ~~        (X01) CTP_A350_PERF_BKGND_GET_BK_DATA.xin   Tue Oct 15 12:50:52 2013   ISS TCA Xinfo, Platform V7.02.04~~
     46         (X01) CTP_A350_PERF_BKGND_GET_BK_DATA.xin   Thu Dec 26 15:54:45 2013   ISS TCA Xinfo, Platform V7.02.04
 47  47
 48  48 ------------------------------------------------------------------------------
 49  49        Compilation                    Test Coverage Statistics       Warnings
 50  50         Unit Name               Total Decision Cond Statemnt Block  Mixed Bool
 51  51 ------------------------------- ----------------------------------- ----------
 52  52 PRF_BKGND_PKG.GET_BK_DATA        100.0   100.0   n/a   100.0  100.0      5  18
 53     ~~                                        226/226   n/a   453/453  888/888~~
     53                                         226/226   n/a   453/453  890/890
 54  54
 55  55 ------------------------------------------------------------------------------
 56  56 Total Percentages                       100.0   n/a   100.0  100.0
 57     ~~Totals                                  226/226   n/a   453/453  888/888~~
     57 Totals                                  226/226   n/a   453/453  890/890
 58  58 Total Coverage                  100.0
 59  59 ------------------------------------------------------------------------------
 60  60 □
 61  61 ************************************************************************
 62  62
 63  63         Test Coverage Analyzer (TCA)  Version 6.14 CLASS A
 64  64
 65  65 ************************************************************************
 66  66
 67  67 Coverage Type: 3
 68  68
 69  69 Date of report / Report name :
 70  70
 71     ~~        Tue Oct 15 13:24:11 2013 CTP_A350_PERF_BKGND_GET_BK_DATA.rpt~~
     71         Thu Dec 26 16:26:59 2013 CTP_A350_PERF_BKGND_GET_BK_DATA.rpt
 72  72
 73  73 Current Directory:
 74  74
 75     ~~         C:\A350_Work\20130716\CTP_A350_PERF_BKGND_GET_BK_DATA(Rework)~~
     75          C:\A350_Work\S4P51418\CTP_A350_PERF_BKGND_GET_BK_DATA
 76  76
 77  77 Paths file(s) :
  78   78 
  79      ~~  (P01) CTP_A350_PERF_BKGND_GET_BK_DATA_d.pth   Tue Oct 15 12:49:28 2013~~
       79   (P01) CTP_A350_PERF_BKGND_GET_BK_DATA_d.pth   Thu Dec 26 15:52:45 2013
  80   80              HADS-290x0 (PC/Windows NT) Ada Compiler, Version 2.9, PS4078711-104
  81   81              HADS-290x0 (PC/Windows NT) Ada Compiler, Version 2.9.61, PS4082845-107
  82   82              Post Object Paths Processor (POPP), v1.6, ps4082858-107
  83   83              Honeywell 29K Assembler, V2.4, PS4072677-105
  84   84              Post Object Paths Processor (POPP), v1.3, ps4082858-104
  85   85              HADS-290x0 (PC/Windows NT) Ada Linker, Version 2.9.61, PS4082846-109
  86   86 
  87   87 XInfo file(s)   Test Date   Test Platform:
  88   88 
  89   89   (P01) CTP_A350_PERF_BKGND_GET_BK_DATA_d.pth
  90      ~~          (X01) CTP_A350_PERF_BKGND_GET_BK_DATA.xin   Tue Oct 15 12:50:52 2013   ISS TCA Xinfo, Platform V7.02.04~~
       90           (X01) CTP_A350_PERF_BKGND_GET_BK_DATA.xin   Thu Dec 26 15:54:45 2013   ISS TCA Xinfo, Platform V7.02.04
  91   91 
  92   92 Source file(s) :
  93   93 
  94      ~~   J:\A350_Builds\A01365\SRC_A01365\fm\PRF_BKGND_PKG_GET_BK_DATA.ADA~~
       94    J:\A350_Builds\A01418\SRC_A01418\fm\PRF_BKGND_PKG_GET_BK_DATA.ADA
  95   95 
  96   96 Total Coverage statistics :
  97   97 
  98   98    TYPE 3, 100.0%
  99   99 
 100  100 
 101  101 ************************************************************************
 102  102                       Source Report Legend Key
 103  103            (Legend Key may be suppressed by -k option)
 104  104 
 105  105 Coverage messages preceding source code lines are annotated with
 106  106 object code block tags of the form [x-y BLOCKTYPE]. For example,
 107  107    [263-17 JMPT] is a block tag for the 17th block of the 263rd unit
 108  108                  in the pathsfile and is a jump true block.
 109  109 This block tag annotation is intended to be used as a reference to
 110  110 the object code level block report (.tcb) generated with the -B option.
 111  111 Each object code block is labeled with a unique block tag.
 112  112 
 113  113 Each line of source code may be prefixed by one of the following
 114  114 indicators:
 115  115    . = source line completely or partially executed
 116  116    * = source line shown ONLY to clarify previous source lines and
 117  117        is NOT actually part of the uncovered source TCA is reporting on
 118  118    Note that no prefix indicates source line was not executed
```

```
119  119
120  120
121  121 ***********************************************************************
122  122
123  123 Compilation Unit / Source file :
124  124
125  125         PRF_BKGND_PKG.GET_BK_DATA
126       ~~        C:\A350\Builds\A01365\SRC_A01365\FM\PRF_BKGND_PKG_GET_BK_DATA.ADA~~
     126         C:\A350\Builds\A01418\SRC_A01418\FM\PRF_BKGND_PKG_GET_BK_DATA.ADA
127  127
128  128 Coverage statistics :
129  129
130  130         TYPE 3, 100.0%
131  131
132  132                          Executed         Total
133  133         Decision Paths       226             226
134  134         Condition Paths      n/a             n/a
135  135         Statements           453             453
136       ~~        Blocks               888             888~~
     136         Blocks               890             890
137  137
138  138
139  139
140  140 *************************** End of Report ****************************
```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst

```
  1   1
  2   2
  3   3                                  RESULTS FILE
  4   4
  5   5 ******************************************************************************
  6   6                               Test Results Summary
  7   7
  8   8           Percentage of Comparisons Passed    : 100.0000%
  9   9
 10  10           Total Number of Comparisons Failed  : 0
 11  11           Total Number of Unknown Comparisons : 0
 12     ~~          Total Number of Comparisons Passed  : 1006~~
 13     ~~          Total Number of Comparisons         : 1006~~
 14     ~~          Total Number of Test Cases Included : 95~~
     12           Total Number of Comparisons Passed  : 1010
     13           Total Number of Comparisons         : 1010
     14           Total Number of Test Cases Included : 99
 15  15
 16  16           Test Complete
 17  17
 18  18
 19  19
 20  20 ******************************************************************************
 21  21
 22  22
 23     ~~Test Start Time: Oct 15 12:51:04 2013~~
     23 Test Start Time: Dec 26 15:55:00 2013
 24  24
 25  25 FILE                    :  CTP_A350_PERF_BKGND_GET_BK_DATA.TDF
 26  26
 27  27 SOURCE CONFIGURATION    :  ISS (Instruction Set Simulator)
 28  28
 29  29 DESCRIPTION             :  This test is to verify that the variables are properly initialized.
 30  30
 31  31 MODIFICATION HISTORY    :
 32  32                            DATE          SCR #        AUTHOR             DESCRIPTION
 33  33                            =====         =====        ======             ===========
 34  34                         1-Aug-2011      1991.91      Bao Tingjie        Updated for A350 S1 Baseline on bulid A01082.
 35  35                                                                       1.Re-used the test from A380 Cert 2 and executed o
        » n A350 S1
 36  36                                                                         Baseline Bulid A01082;
 37  37                                                                       2.Updated requirement files'version as:
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
  38   38          11_2_1_1.SRD  ; 84(FMS2000,A3XX)->5(FMS2000,A350
          » _A380)
  39   39          11_2_1_8.SRD  ; 41(FMS2000,A3XX)->5(FMS2000,A350
          » _A380)
  40   40          11_2_8_1.SRD  ; 29(FMS2000,A3XX)->4(FMS2000,A350
          » _A380)
  41   41          11_2_1_1_7.SRD; 71(FMS2000,A3XX)->3(FMS2000,A350
          » _A380)
  42   42          11_2_1_13.SRD ; 22(FMS2000,A3XX)->8(FMS2000,A350
          » _A380)
  43   43          11_5_1.SRD    ; 25(FMS2000,A3XX)->3(FMS2000,A350
          » _A380)
  44   44          11_3_5_1.SRD  ; 61(FMS2000,A3XX)->7(FMS2000,A350
          » _A380)
  45   45          11_2_2.SRD    ; 33(FMS2000,A3XX)->6(FMS2000,A350
          » _A380)
  46   46          11_2_9.SRD    ; 17(FMS2000,A3XX)->5(FMS2000,A350
          » _A380)
  47   47          11_20_3.SRD   ; 34(FMS2000,A3XX)->2(FMS2000,A350
          » _A380)
  48   48          11_21_6.SRD   ; 18(FMS2000,A3XX)->4(FMS2000,A350
          » _A380)
  49   49          11_21_5.SRD   ; 19(FMS2000,A3XX)->2(FMS2000,A350
          » _A380)
  50   50          11_21_7.SRD   ; 10(FMS2000,A3XX)->2(FMS2000,A350
          » _A380)
  51   51          11_2_8_2.SRD  ; 13(FMS2000,A3XX)->2(FMS2000,A350
          » _A380)
  52   52          11_1_6.SRD    ;9(FMS2000,A3XX)->2(FMS2000,A350_A
          » 380)
  53   53          11_2_1_10.SRD ;25(FMS2000,A3XX)->3(FMS2000,A350_
          » A380)
  54   54          11_2_1_11.SRD ;22(FMS2000,A3XX)->3(FMS2000,A350_
          » A380)
  55   55          11_2_1_5.SRD  ;29(FMS2000,A3XX)->4(FMS2000,A350_
          » A380)
  56   56          11_2_1_6.SRD  ;39(FMS2000,A3XX)->4(FMS2000,A350_
          » A380)
  57   57          11_2_1_7.SRD  ;34(FMS2000,A3XX)->3(FMS2000,A350_
          » A380)
  58   58          11_2_1_9.SRD  ;30(FMS2000,A3XX)->3(FMS2000,A350_
          » A380)
  59   59          PERF_BACKGROUND_EXEC.SDD;325(FMS2000,A3XX)->
  60   60                                   17(FMS2000,A350_A380)
```

```
   61   61                                                                          PERF_ADS.SDD   ; 46(FMS2000,A3XX)->4(FMS2000,A35
            » 0_A380)
   62   62                                                                        3.Modified the breakpoint number as code changed a
            » nd all IO
   63   63                                                                          relative SUT_VARS
   64   64                                                                        4.Updated TCs 1-6,8,10,14,15,18,19,22-24,26,28,33,
            » 34,52 to
   65   65                                                                          modifiy the breakpoint number and IO relative va
            » riables
   66   66                                                                        5.Updated as per SCR 741.01(FMS2000,A350_A380)
   67   67                                                                         1)Updated TCs 11-13,27 to delete PERF_SDD_08116_I
            » NT
   68   68                                                                         2)Updated TCs 16,17,25,27,41-43 to verify PERF_SD
            » D_4794_INT
   69   69                                                                           completely
   70   70                                                                         3)Updated TC 29 to verify PERF_SDD_08171_INT comp
            » letely.
   71   71                                                                         4)Updated TC 7 as the variable
   72   72                                                                           Perf_Background_Dpkg.Pshfdecel_found is deleted
   73   73                                                                        6.Updated as per SCR 632.20(FMS2000,A350_A380)
   74   74                                                                         1)Deleted PERF_SDD_07539_INT and PERF_SDD_07541_I
            » NT from TCs
   75   75                                                                           29,31,32 as they not allocated to A350 anymore.
   76   76                                                                         2)Updated TCs 16,29-32 to verify PERF_SDD_08225_I
            » NT completely
   77   77                                                                         3)Updated TCs 29,30,31 to verify PERF_SDD_08227_I
            » NT completely
   78   78                                                                         4)Updated TCs 9,39,40 to delete PERF_SDD_2248 and
            »  add
   79   79                                                                           PERF_SDD_08226
   80   80                                                                         5)Deteted PERF_SRD_6015 form TCs TCs 1-6,8-13 as 
            » it is not
   81   81                                                                           to traced to PERF_SDD_0409
   82   82                                                                        7.Updated as per SCR 632.19(FMS2000,A350_A380)
   83   83                                                                          1)Added PERF_SRD_23387 in TCs 1-6,8-13 as it tra
            » ced to
   84   84                                                                            PERF_SDD_0409
   85   85                                                                          2)Added PERF_SRD_23549 in TCs 9,39,40 as it trac
            » ed to
   86   86                                                                            PERF_SDD_08226
   87   87                                                                        8.Updated TCs 29-32,added TCs 59-61 to verify
   88   88                                                                          PERF_SDD_07500_INT,
   89   89                                                                          PERF_SDD_07501_INT,PERF_SDD_07502_INT,PERF_SDD_0
            » 7503_INT,
   90     90                                                            PERF_SDD_07504_INT,PERF_SDD_07505_INT,PERF_SDD_0
             » 7506,
   91     91                                                            PERF_SDD_07540_INT,PERF_SDD_07542_INT,PERF_SDD_0
             » 7543_INT
   92     92
   93     93                      DEC-25-2011     3149.08      Hao Zhilian      Updated for A350 S1.1 on build A01187.
   94     94                                                          1.Updated the SDD/SRD generation as following:
   95     95                                                            11_2_1_1.SRD  ; 5 -> 18
   96     96                                                            11_2_1_8.SRD  ; 5 -> 8
   97     97                                                            11_2_8_1.SRD  ; 4 -> 8
   98     98                                                            11_2_1_1_7.SRD; 3 -> 7
   99     99                                                            11_2_1_13.SRD ; 8 -> 15
  100    100                                                            11_5_1.SRD    ; 3 -> 6
  101    101                                                            11_3_5_1.SRD  ; 7 -> 14
  102    102                                                            11_2_2.SRD    ; 6 -> 18
  103    103                                                            11_2_9.SRD    ; 5 -> 7
  104    104                                                            11_20_3.SRD   ; 2 -> 4
  105    105                                                            11_21_6.SRD   ; 4 -> 9
  106    106                                                            11_21_5.SRD   ; 2 -> 3
  107    107                                                            11_21_7.SRD   ; 2 -> 3
  108    108                                                            11_2_8_2.SRD  ; 2 -> 3
  109    109                                                            11_2_1_10.SRD ; 3 -> 4
  110    110                                                            11_2_1_11.SRD ; 3 -> 4
  111    111                                                            11_2_1_5.SRD  ; 4 -> 6
  112    112                                                            11_2_1_6.SRD  ; 4 -> 6
  113    113                                                            11_2_1_7.SRD  ; 3 -> 6
  114    114                                                            11_2_1_9.SRD  ; 3 -> 7
  115    115                                                            PERF_BACKGROUND_EXEC.SDD; 17 -> 38
  116    116                                                            PERF_ADS.SDD            ; 4  -> 6
  117    117                                                          2.Updated the breakpiont number as the code change
             » d.
  118    118                                                          3.Updated TCs 1, 2, 8, 11, 25, 27, 29~32 to delete
             »  the SDD
  119    119                                                            anchor PERF_SDD_3731_INT as per SCR 494.01.
  120    120                                                          4.Updated as per 391.01
  121    121                                                            A.Added TCs 62~67 to verify the SDD anchor PERF_
             » SDD_08588_INT
  122    122                                                            B.Updated TCs 1~2 to verify the SDD anchor PERF_
             » SDD_07496_INT
  123    123                                                              completely.
  124    124                                                          5.Updated as per 875.16
  125    125                                                            A.Added TCs 62~64 to verify the SDD anchor PERF_
             » SDD_08665.
  126    126                                                            B.Added TCs 64~65 to verify the SDD anchor PERF_
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          » SDD_08666.
127  127                                                                        C.Added TCs 63,65~67 to verify the SDD anchor PE
          » RF_SDD_08667.
128  128                                                                        D.Updated TC 7 and added TC 68 to verify the SDD
          »  anchor
129  129                                                                          PERF_SDD_4796 completely.
130  130                                                                      6.Updated as per 870.01
131  131                                                                        A.Updated TCs 19~21 and added TCs 69~72 to verif
          » y the SDD
132  132                                                                          anchor PERF_SDD_4600 completely.
133  133
134  134                        Feb-19-2012     3149.08      Hao Zhilian      Rework for A350 S1.1 on build A01187.
135  135                                                                      1.Added SRD anchor PERF_SRD_23774 and updated TCs
          » 63, 65~67
136  136                                                                        to trace PERF_SDD_08667 to PERF_SRD_23774 under
          » SCR 875.15.
137  137                                                                      2.Modified the description of TCs 7, 19~21 and 68~
          » 72.
138  138                                                                      3.Modified TC 70 to verify PERF_SDD_4600 completel
          » y.
139  139
140  140                       3-July-2012      4418.03      Sun Likun        Updated for A350 S2 Baseline on bulid A01256.
141  141                                                                      1.Updated the SDD/SRD generation as following:
142  142                                                                        11_2_1_10.SRD ; 4->7
143  143                                                                        PERF_BACKGROUND_EXEC.SDD; 38->50
144  144                                                                      2.Added SRD anchor PERF_SRD_23964, PERF_SRD_23965,
145  145                                                                        PERF_SRD_24100 to trace to PERF_SDD_0409 under S
          » CR 2889.04.
146  146                                                                      3.Update breakpoints as per code changed.
147  147                       12-July-2012      4418.03      Sun Likun       Rework after HTS-C review.
148  148                                                                      1.Updated 11_2_1_10.SRD generation in SDD/SRD DETA
          » ILS.
149  149
150  150                       20-Nov-2012      5391.10      Dun Qing      Updated for A350 S2 on build A01283.
151  151                                                                      1.Updated the SDD/SRD generation as following:
152  152                                                                        11_2_1_1.SRD  ; 18 -> 26
153  153                                                                        11_2_1_8.SRD  ; 8 -> 9
154  154                                                                        11_2_1_1_7.SRD; 7 -> 19
155  155                                                                        11_2_1_13.SRD ; 15 -> 18
156  156                                                                        11_3_5_1.SRD  ; 14 -> 23
157  157                                                                        11_2_2.SRD    ; 18 -> 24
158  158                                                                        11_2_9.SRD    ; 7 -> 8
159  159                                                                        11_21_6.SRD   ; 9 -> 11
160  160                                                                        11_2_1_11.SRD ; 4 -> 7
```

```
  161   161                                                                        11_2_1_9.SRD  ; 7 -> 10
  162   162                                                                        PERF_BACKGROUND_EXEC.SDD; 50 -> 66
  163   163                                                                        Added the SDD/SRD generation as following:
  164   164                                                                        11_1.SRD
  165   165                                                                      2.Updated the breakpiont number as the code change
             » d.
  166   166                                                                      3.Updated SUT_VARS and NOTES
  167   167                                                                      4.Updated as per 3652.00
  168   168                                                                        A.Added TCs 73~78 and Updated TC 39 to verify th
             » e SDD anchor PERF_SDD_09063
  169   169                                                                        B.Added TCs 73~74 to verify the SDD anchor PERF_
             » SDD_09064
  170   170                                                                        C.Added TCs 73 and Updated TCs 9,39,40 to verify
             »  the SDD anchor PERF_SDD_08226
  171   171                                                                        D.Added following SRD anchor:
  172   172                                                                           PERF_SRD_2801, PERF_SRD_23365, PERF_SRD_23455
             » ,
  173   173                                                                           PERF_SRD_23478, PERF_SRD_23491,PERF_SRD_23503
             » _INT,
  174   174                                                                           PERF_SRD_2489
  175   175                                                                         Added following SDD anchor:
  176   176                                                                           PERF_SDD_09063, PERF_SDD_09064
  177   177                                                                         Removed following trace links:
  178   178                                                                           PERF_SDD_08226 -->   PERF_SRD_10721
  179   179                                                                           PERF_SDD_08226 -->   PERF_SRD_23549
  180   180                                                                         Added following trace links:
  181   181                                                                            PERF_SDD_08226 --> PERF_SRD_2801
  182   182                                                                            PERF_SDD_08226 --> PERF_SRD_23365
  183   183                                                                            PERF_SDD_08226 --> PERF_SRD_23455
  184   184                                                                            PERF_SDD_09063 --> PERF_SRD_23478
  185   185                                                                            PERF_SDD_09063 --> PERF_SRD_23491
  186   186                                                                            PERF_SDD_09064 --> PERF_SRD_23503_INT
  187   187                                                                            PERF_SDD_09064 --> PERF_SRD_2489
  188   188                                                                      5.Updated as per 5637.01
  189   189                                                                        A.Added TCs 73~74 and Modified TC 68 to verify t
             » he SDD anchor PERF_SDD_0409.
  190   190                                                                        B.Removed trace link PERF_SDD_0409 --> PERF_SRD_
             » 23964
  191   191                                                                      6.Updated as per 5309.02
  192   192                                                                        A.Added TC 73 to verify the SDD anchor PERF_SDD_
             » 4155_INT
  193   193
  194   194                      26-Nov-2012      5391.10      Dun Qing       Rework after HTSC inspection.
  195   195                                                                      1.Modified the description of TCs 1,2,39,40,68,73,
             » 74
  196   196
  197   197                       17-Jul-2013      7226.01      Jiang Xiaomin      Updated for A350 S3 on build A01344.
  198   198                                                                      1.Updated the SDD/SRD generation as following:
  199   199                                                                        11_2_1_1.SRD  ; 26 -> 28
  200   200                                                                        11_2_1_8.SRD  ; 9 -> 15
  201   201                                                                        11_2_8_1.SRD  ; 8 -> 11
  202   202                                                                        11_2_1_1_7.SRD; 19 -> 20
  203   203                                                                        11_2_1_13.SRD ; 18 -> 20
  204   204                                                                        11_3_5_1.SRD  ; 23 -> 30
  205   205                                                                        11_2_2.SRD    ; 24 -> 27
  206   206                                                                        11_20_3.SRD   ; 4 -> 5
  207   207                                                                        11_1_6.SRD    ; 2 -> 3
  208   208                                                                        11_2_1_10.SRD ; 7 -> 14
  209   209                                                                        11_2_1_6.SRD  ; 6 -> 7
  210   210                                                                        11_2_1_7.SRD  ; 6 -> 10
  211   211                                                                        11_2_1_9.SRD  ; 10 ->20
  212   212                                                                        11_1.SRD  ;  32 ->37
  213   213                                                                        PERF_BACKGROUND_EXEC.SDD; 66 -> 91
  214   214                                                                      2.Updated the breakpiont number as the code chan
             » ged.
  215   215                                                                      3.Added the TC83_85 to verify the ANCHOR PERF_SD
             » D_0409 completely
  216   216                                                                        as per scr 5970.01&3184.02&7649.01.
  217   217                                                                      4.Updated the TC73 to verify the ANCHOR PERF_SDD
             » _4155_INT completely
  218   218                                                                        as per scr 7665.03&7649.01.
  219   219                                                                      5.Updated the TC7&68 to verify the ANCHOR PERF_S
             » DD_4796 completely
  220   220                                                                        as per scr 3184.02.
  221   221                                                                      6.Updated the TC73_79 and added the TC80_82 to v
             » erify the ANCHOR
  222   222                                                                        PERF_SDD_09063 completely as per scr 7191.00.
  223   223                                                                      7.Added the anhor PERF_SRD_6005_INT and trace to
             »  related TCs
  224   224                                                                        as per scr 3184.01.
  225   225                                                                      8.Corrected the input of TC19_21&68_72.
  226   226
  227   227                       23-Aug-2013      7226.01      Jiang Xiaomin      Rework after HTSC inspection.
  228   228                                                                      1.Corrected he previous histroy.
  229   229                                                                      2.Corrected the TC7 for mistake.
  230   230                                                                      3.Removed the TC79 for duplicated and corrected
             » the TC80's description.
  231   231
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File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

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232  232                      11-Sep-2013     7854.01      Ye Lin             Updated for A350 S3 on build A01365.
233  233                                                                      1.Updated the SDD/SRD generation as following:
234  234                                                                        11_2_1_1.SRD  ; 28 -> 29
235  235                                                                        11_3_5_1.SRD  ; 30 -> 33
236  236                                                                        11_1.SRD      ;  37 -> 43
237  237                                                                        PERF_BACKGROUND_EXEC.SDD; 91 -> 96
238  238                                                                      2.Updated the breakpiont number as the code chan
         » ged.
239  239                                                                      3.Updated as per SCR 7708.01
240  240                                                                       A.Changed PERF_SDD_07540_INT to PERF_SDD_07540.
241  241                                                                      4.Updated as per SCR 7854.01
242  242                                                                       A.Modified TCs 8,34~38 as per SDD PERF_SDD_2249
         » _INT
243  243                                                                         is updated.
244  244                                                                       C.Added TCs 85~95 as per SDD PERF_SDD_2249_INT
         » is updated.
245  245
246  246                      09-Oct-2013     7854.01      Ye Lin             Rework after HTSC inspection.
247  247                                                                      1. Modified the previous history.
248  248
249  249                      15-Oct-2013     7854.01      Ye Lin             Rework after self-review.
250  250                                                                      1. Deleted PERF_SRD_10721 because it do not need
         »  to be tested here.
251  251
     252                      26-Dec-2013     8073.01      Lin Ye             Updated for A350 phase 5 on build A01418.
     253                                                                      1. Updated the SDD/SRD generation as following:
     254                                                                         11_2_2.SRD    ; 27 -> 29
     255                                                                         11_2_9.SRD    ; 8 -> 10
     256                                                                         PERF_BACKGROUND_EXEC.SDD; 96 -> 103
     257                                                                      2. Updated breakpoint for TCs 1~6,8~10,14,15,17,
         » 18,22~24,26,28~34,39,40,59~61,73~79,82~84.
     258                                                                      3. Updated as per SCR# 8053.01:
     259                                                                       A. Added TCs 96~99 as PERF_SDD_09201_INT is add
         » ed.
     260
252  261 SRD/SDD DETAILS       :  11_2_1_1.SRD  ; 29
253  262                         11_2_1_8.SRD  ; 15
254  263                         11_2_8_1.SRD  ; 11
255  264                         11_2_1_1_7.SRD; 20
256  265                         11_2_1_13.SRD ; 20
257  266                         11_5_1.SRD    ; 6
258  267                         11_3_5_1.SRD  ; 33
259      ~~                         11_2_2.SRD    ; 27~~
260      ~~                         11_2_9.SRD    ; 8~~
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
     268                                 11_2_2.SRD     ; 29
     269                                 11_2_9.SRD     ; 10
261  270                                 11_20_3.SRD    ; 5
262  271                                 11_21_6.SRD    ; 11
263  272                                 11_21_5.SRD    ; 3
264  273                                 11_21_7.SRD    ; 3
265  274                                 11_2_8_2.SRD   ; 3
266  275                                 11_1_6.SRD     ; 3
267  276                                 11_2_1_10.SRD  ; 14
268  277                                 11_2_1_11.SRD  ; 7
269  278                                 11_2_1_5.SRD   ; 6
270  279                                 11_2_1_6.SRD   ; 7
271  280                                 11_2_1_7.SRD   ; 10
272  281                                 11_2_1_9.SRD   ; 20
273      ~~                                 11_1.SRD       ; 43~~
274      ~~                                 PERF_BACKGROUND_EXEC.SDD; 96~~
     282                                 11_1.SRD       ; 43
     283                                 PERF_BACKGROUND_EXEC.SDD; 103
275  284                                 PERF_ADS.SDD            ; 6
276  285
277  286 TRACE DETAILS         :
278  287                                 ANCHOR  :  A350_PERF_TEST_2401
279  288
280  289                                 SOURCE  :  SDD; PERF_SDD_0410, PERF_SDD_0412_INT, PERF_SDD_3317_INT, PERF_SDD_4778_INT, PERF_
         » SDD_4779_INT,
281  290                                                 PERF_SDD_0417_INT, PERF_SDD_3681_INT, PERF_SDD_3682_INT, PERF_SDD_4780_INT, P
         » ERF_SDD_4795,
282  291                                                 PERF_SDD_0418_INT, PERF_SDD_2174_INT, PERF_SDD_2177_INT, PERF_SDD_4794_INT,
283  292                                                 PERF_SDD_2852_INT, PERF_SDD_2853_INT, PERF_SDD_2249_INT, PERF_SDD_2276_INT, P
         » ERF_SDD_4796,
284  293                                                 PERF_SDD_3482_INT, PERF_SDD_2293_INT, PERF_SDD_3053_INT, PERF_SDD_3055_INT,
285  294                                                 PERF_SDD_3105, PERF_SDD_0409, PERF_SDD_2123_INT, PERF_SDD_07919, PERF_SDD_079
         » 56,
286  295                                                 PERF_SDD_4155_INT, PERF_SDD_4327, PERF_SDD_3746_INT, PERF_SDD_3718,
287  296                                                 PERF_SDD_3887, PERF_SDD_4328, PERF_SDD_4339,
288  297                                                 PERF_SDD_5585, PERF_SDD_4600, PERF_SDD_5607_INT, PERF_SDD_5608_INT,
289  298                                                 PERF_SDD_5610_INT, PERF_SDD_5611_INT, PERF_SDD_07160_INT, PERF_SDD_07169_INT,
290  299                                                 PERF_SDD_07188_INT, PERF_SDD_07496_INT, PERF_SDD_07497_INT, PERF_SDD_07498_IN
         » T,
291  300                                                 PERF_SDD_07499_INT, PERF_SDD_07500_INT, PERF_SDD_07501_INT, PERF_SDD_07502_IN
         » T,
292  301                                                 PERF_SDD_07503_INT, PERF_SDD_07504_INT, PERF_SDD_07505_INT, PERF_SDD_07506,
293  302                                                 PERF_SDD_3888_INT, PERF_SDD_07540,
294  303                                                 PERF_SDD_07542_INT, PERF_SDD_07543_INT, PERF_SDD_07544_INT, PERF_SDD_07545_IN
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File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
          » T,
 295  304                                          PERF_SDD_07546_INT, PERF_SDD_07547_INT, PERF_SDD_07548_INT, PERF_SDD_07549,
 296  305                                          PERF_SDD_5609_INT, PERF_SDD_07495_INT, PERF_SDD_08158_INT, PERF_SDD_08171_INT
          » ,
 297  306                                          PERF_SDD_08159_INT, PERF_SDD_08225_INT, PERF_SDD_08227_INT, PERF_SDD_08226,
 298  307                                          PERF_SDD_08588_INT, PERF_SDD_08665, PERF_SDD_08666, PERF_SDD_08667,
 299      ~~                                         PERF_SDD_09063, PERF_SDD_09064,~~
      308                                          PERF_SDD_09063, PERF_SDD_09064, PERF_SDD_09201_INT
 300  309
 301  310                                     SRD; PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_IN
          » T,
 302  311                                          PERF_SRD_10200_INT, PERF_SRD_12371_INT, PERF_SRD_1554_A3XX,
 303  312                                          PERF_SRD_1919, PERF_SRD_6057, PERF_SRD_8964_INT, PERF_SRD_1592,
 304  313                                          PERF_SRD_8976_INT, PERF_SRD_10199_INT, PERF_SRD_1490_INT,
 305  314                                          PERF_SRD_12437, PERF_SRD_12370_INT, PERF_SRD_12404,
 306  315                                          PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR,
 307  316                                          PERF_SRD_12517_DR, PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT,
 308  317                                          PERF_SRD_1584_A3XX, PERF_SRD_12409_INT, PERF_SRD_1358,
 309  318                                          PERF_SRD_9587, PERF_SRD_9656_INT, PERF_SRD_6192, PERF_SRD_6012, PERF_SRD_1590
          » ,
 310  319                                          PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT,
 311  320                                          PERF_SRD_12670_INT, PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_IN
          » T,
 312  321                                          PERF_SRD_23387, PERF_SRD_23549, PERF_SRD_23775, PERF_SRD_23964, PERF_SRD_2396
          » 5,
 313  322                                          PERF_SRD_24100, PERF_SRD_23455, PERF_SRD_23478, PERF_SRD_23491, PERF_SRD_2350
          » 3_INT
 314  323                                          PERF_SRD_23365,PERF_SRD_2489,PERF_SRD_2801, PERF_SRD_6005_INT
 315  324
 316  325 -- -- --        BEGIN PROCESSING INCLUDE FILE C:\Program Files\honeywell_eng\TGS_v4_5_2\bin\debug_cmds.inc
 317  326 -- -- --        END PROCESSING INCLUDE FILE C:\Program Files\honeywell_eng\TGS_v4_5_2\bin\debug_cmds.inc
 318  327 -- -- -- ******************************************************************
 319  328 -- -- --                    INITIALIZATION SECTION
 320  329 -- -- -- ******************************************************************
 321  330
 322  331
 323  332 CONSTANT                                                                                                       VALUE
 324  333 --------------------------------------------------------------------------------------------------  ------------------
          » --------
 325  334 FP_DEF_TOL
          »    0.001
 326  335
 327  336
 328  337 define symbol True                                 := Standard.True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
329   338 define symbol False                                := Standard.False
330   339 define symbol Engoutnotval                         := Perf_Int_Base_Tpkg.Engoutnotval
331   340 define symbol Nopreds                              := Perf_Int_Base_Tpkg.Nopreds
332   341 define symbol Prdstodest                           := Perf_Int_Base_Tpkg.Prdstodest
333   342 define symbol Preflight                            := base_domain_services_tpkg.Preflight
334   343 define symbol Takeoff                              := base_domain_services_tpkg.Takeoff
335   344 define symbol Cruise                               := base_domain_services_tpkg.Cruise
336   345 define symbol Descent                              := base_domain_services_tpkg.Descent
337   346 define symbol Approach                             := base_domain_services_tpkg.Approach
338   347 define symbol Goaround                             := base_domain_services_tpkg.Goaround
339   348 define symbol Climb                                := base_domain_services_tpkg.Climb
340   349 define symbol Altpln                               := Perf_Int_Base_Tpkg.Altpln
341   350 define symbol No_Itinerary                         := Perf_Int_Base_Tpkg.No_Itinerary
342   351 define symbol Fuel_Plan_Fpln_Preds                 := Perf_Int_Base_Tpkg.Fuel_Plan_Fpln_Preds
343   352 define symbol Secondary                            := Fprequestrec_Types.Secondary
344   353 define symbol Secondary2                           := Fprequestrec_Types.Secondary2
345   354 define symbol Secondary3                           := Fprequestrec_Types.Secondary3
346   355 define symbol Is_Active                            := Perf_Int_Base_Tpkg.Is_Active
347   356 define symbol Indep_From_Active                    := Perf_Int_Base_Tpkg.Indep_From_Active
348   357 define symbol Valid                                := Io_interface_tpkg.Entry_Stat_Type'(Io_interface_tpkg.Valid)
349   358 define symbol Invalid                              := Io_interface_tpkg.Entry_Stat_Type'(Io_interface_tpkg.Invalid)
350   359 define symbol Fuel_Plan_Stage1                     := Perf_Int_Base_Tpkg.Fuel_Plan_Stage1
351   360 define symbol Active                               := Fprequestrec_Types.Active
352   361 define symbol Temporary                            := Fprequestrec_Types.Temporary
353   362 define symbol Prim_Fpln_Preds                      := Perf_Int_Base_Tpkg.Prim_Fpln_Preds
354   363 define symbol Current_Mode_Preds                   := Perf_Int_Base_Tpkg.Current_Mode_Preds
355   364 define symbol Current_Mode_Hi_Pri                  := Perf_Int_Base_Tpkg.Current_Mode_Hi_Pri
356   365 define symbol Pred_To_Alt_Preds                    := Perf_Int_Base_Tpkg.Pred_To_Alt_Preds
357   366 define symbol Fuel_Plan_Stage2                     := Perf_Int_Base_Tpkg.Fuel_Plan_Stage2
358   367 define symbol Cas                                  := Fmcs_Base_Types.Cas
359   368 define symbol Nopath                               := Perf_Despath_Tpkg.Nopath
360   369 define symbol Onpath                               := Perf_Despath_Tpkg.Onpath
361   370 define symbol INVALIDPATH                          := Perf_Despath_Tpkg.INVALIDPATH
362   371 define symbol Zeroab                               := Perf_Int_Base_Tpkg.Zeroab
363   372 define symbol Fullab                               := Perf_Int_Base_Tpkg.Fullab
364   373 define symbol Clb_Spdlim                           := Perf_Buffer_Types.Clb_Spdlim
365   374 define symbol Clean                                := Perf_Config_Dpkg.Clean
366   375 define SYMBOL Copy_From_Active                     := Perf_Int_Base_Tpkg.Copy_From_Active
367   376 define SYMBOL No_Preds                             :=  Perf_Int_Base_Tpkg.No_Preds
368   377 define symbol Noise_End_Alt_Status := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
          » _Status"
369   378 define symbol Noise_Speed_Val      := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_V
          » al"
370   379 define Symbol Noise_TSPD           := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_TSPD"
```

```
 371   380 define symbol Noise_End_Alt        := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
           » "
 372   381 define symbol Noise_Speed          := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed"
 373   382 define symbol Noise_Thrust         := "Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Thrust"
 374   383 define symbol Drtnone              := Cdk_Entry_Tpkg.Climb_Thrust_Mode_Type'value("Drtnone")
 375   384 define symbol Maxclb               := Cdk_Entry_Tpkg.Climb_Thrust_Mode_Type'value("Maxclb")
 376   385 define SYMBOL Icaolimited          :=  Spdchgtgt_Tpkg.Icaolimited
 377   386 define SYMBOL Returntoecon          :=  Spdchgtgt_Tpkg.Returntoecon
 378   387 define SYMBOL Optimum_Altitude     := Perf_Int_Base_Tpkg.Optimum_Altitude
 379   388
 380   389
 381   390 DEFAULTS                                                                                            VALUE
 382   391 -------------------------------------------------------------------------------------------  ------------------
           » --------
 383   392 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt_Status            Takeoff_Alt_Type
           » s.Active
 384   393 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
           »    False
 385   394 Perf_Background_Dpkg.Noise_Data.Speed.Valid
           »    False
 386   395 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai
           »    False
 387   396 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai
           »    False
 388   397 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond
           »    False
 389   398 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1                                                                        system
           » 'address
 390   399 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.FRAME_120_Disc_Word_3.Final_Descent_Mode_Active
           »     True
 391   400 Io_Adc_Sel_Pkg.The_Selected_Adc                                                                              system
           » 'address
 392   401 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Sat
           »     True
 393   402 Io_IRS_Sel_Pkg.The_Selected_IRS                                                                              system
           » 'address
 394   403 Io_IRS_Sel_Pkg.The_Selected_IRS.all.Io_IRS_MSG2_Validity_Rec.Inertial_Vert_Speed
           »     True
 395   404 Perf_Background_Dpkg.Pcactorsec
           »   Active
 396   405 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec
           »    False
 397   406 Perf_Background_Dpkg.Psdeslimspdchg
           »    False
```

```
CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_valid
»     true
CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
»    false
CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt
»    100.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
»      0.0
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
»      0.0


CONSTANT                                                                                                       VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
DBG_TIMEOUT
»      300


TESTID: 1

    Verify that if there is no engine out, engine-out predictions flag is set to ENGOUTNOTVAL.
    PERF_SDD_0412_INT, PERF_SDD_3317_INT, PERF_SDD_0417_INT
    If the current itinerary is associated with the Is_Active flight plan, or with a secondary flight plan copied
    from the Is_Active, a variety of global data are retrieved which are common to both the Is_Active and secondary
    predictions processes.

    TO verify when the working flight plan is Is_Active , a variety of following global data  be retrieved
     - A/C altitude and its validity
     - A/C position
     - A/C track and its validity
     - A/C ground speed and its validity
     - Wind bearing
     - Wind magnitude
     - Wind validity
     - Health status of Engines (Inboard and Outboard Engines of Captain and FO)
     - Throttle lever angle (Inboard and Outboard Engines of Captain and FO)
     - A/C flightphase
     - Clock time
     - FE maneuver speed and validity
     - Airborne flag
       when Io_Fms_Aircraft_State_Dpkg.Is_Airborne is true
       and Perf_Background_Dpkg.Pcfltphase is not Preflight and Done;
     - Lateral auto mode flag
```

```
 435 | 444 |      - Current aircraft cross track error from guidance.
 436 | 445 |      - Level change auto control mode flag
 437 | 446 |      - Vertical auto mode flag
 438 | 447 |      - Third altitude from guidance
 439 | 448 |      - Current altitude constraint management related data(Pccuraltcstr) from guidance
 440 | 449 |      - Previous captured barometric altitude related data (Pcprebcalt) from guidance
 441 | 450 |      - A/C is descending from level segment or alt constraint (Early_Descent_From_Level) from guidance
 442 | 451 |      - Engine-out flag
 443 | 452 |      - Engines off status
 444 | 453 |      - Number of engines out via Prf_Aeroeng_Pkg.Get_Num_Eng_Out
 445 | 454 |      -when Perf_Background_Dpkg.Pcpathref is not Onpath the descent path is not be captured
 446 | 455 |      - Cruise altitude from Fpln_Ext_Dpkg.Get_Cruise_Alt
 447 | 456 |      - when Sel_Src_Inertial_Vert_Speed is valid, A/C inertial vertical speed is Io_Common_Irs_Dpkg.Data
 448 | 457 |      - Speed mode from Guid_Ext_Dpkg.Va3vertmde
 449 | 458 |      - Active Speed Restriction Annunciation from Guid_Ext_Dpkg.Active_Speed_Restriction
 450 | 459 |      -  when Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Activeis valid, Altitude Hold mode flag status from FMGC via th
     |     | » e interface
 451 | 460 |      - Final descent mode flag from FMGC armed or active status via the interfaces
 452 | 461 |        Io_Fg_Fm_Internal_Dpkg.Final_Descent_Mode_Active.Data and
 453 | 462 |        Io_Fg_Fm_Internal_Dpkg.Final_Descent_Mode_Armed.Data
 454 | 463 |      - A/C configuration via Prf_Acstate_Pkg.Get_Ac_Config
 455 | 464 |      - A/C airbrake extension indicator to zero airbrake
 456 | 465 |      - Step climb & step descent active flags (Psstpclbact & Psstpdesact) are set from guidance.
 457 | 466 |      -  when the Engine out status and the VG indicator that Green-Dot Speed is not latched,
 458 | 467 |      then the flag indicating that VG is using latched Green-Dot descent speed is not set
 459 | 468 |      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
 460 | 469 |      PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
 461 | 470 |      PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
 462 | 471 |
 463 | 472 |    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
 464 | 473 |    working flight plan.
 465 | 474 |    PERF_SDD_4328 (PERF_SRD_10166_INT)
 466 | 475 |
 467 | 476 |    If Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is currently in
     |     | »  Noise Ramp
 468 | 477 |    segment and no engine out condition exist then the following noise data shall be set up for background's usage:
 469 | 478 |    PERF_SDD_5607_INT
 470 | 479 |
 471 | 480 |    The validity of Perf_Background_Dpkg.Noise_Data.Altitude shall be set to valid and its value is set to Noise_End_A
     |     | » lt obtained
 472 | 481 |    from FPLN.
 473 | 482 |    PERF_SDD_5608_INT
 474 | 483 |
 475 | 484 |    Here, Cdk_Vert_Dpkg.Engine_Out indicates that there is no Engine Out.
 476   485 
 477   486      If Noise Speed (Noise_Speed_Val) from FPLN is valid then the validity of Perf_Background_Dpkg.Noise_Data.Speed sha
             » ll be set to
 478   487      valid and its value is set to Noise_Speed obtained from FPLN, otherwise its validity is set to invalid.
 479   488      PERF_SDD_5610_INT  (In this TC, Noise Speed (Noise_Speed_Val) from FPLN is valid)
 480   489 
 481   490      The Perf_Background_Dpkg.Noise_Data.Thrust shall be set to Noise_Thrust obtained from FPLN.
 482   491      PERF_SDD_5609_INT
 483   492 
 484   493      If Noise TSPD from FPLN is valid than the validity of Perf_Background_Dpkg.Noise_Data.TSPD shall be set to valid a
             » nd its
 485   494      value is set to Noise_TSPD obtained from FPLN, otherwise its validity is set to Invalid.
 486   495      PERF_SDD_5611_INT (Here Noise TSPD from FPLN is invalid.)
 487   496 
 488   497     *If  1. the Flex_Takeoff_Temperature validity is true,
 489   498         *2. the aircraft is in Climb or below, ("below" in this testcase)
 490   499         *3. the aircraft altitude is at or below thrust reduction altitude("at" in this testcase, considering tolerance
             »  of 1.0 foot)
 491   500             and
 492   501          4. there is not an engine out condition
 493   502        then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
 494   503            Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
 495   504        where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C.
 496   505        *If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
 497   506            Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
 498   507         Else
 499   508            Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
 500   509        Otherwise the Flex_Isadev value will be set to zero.
 501   510      PERF_SDD_5585(PERF_SRD_12437)
 502   511 
 503   512      The airborne flag(Psairborne) shall be set when
 504   513          - the Is_Airborne flag from IO is valid and
 505   514          - the current flight phase is not in preflight or done.
 506   515      PERF_SDD_07495_INT
 507   516 
 508   517      The ADC/FG input data validity(Adc_Fg_Valid) shall be determined from the validity of
 509   518        - Static Air Temperature
 510   519        - Pressure Altitude
 511   520        - CAS, TAS, Mach (only if the aircraft is airborne) and
 512   521      For the valid ADC/FG input data, the following data are retrieved from IO
 513   522        - A/C Pressure altitude
 514   523        - A/C CAS
 515   524        - A/C Mach
 516   525        - A/C TAS
```

```
        - A/C Current TAS Validity
      Also if the baro corrected altitude is valid, then the current baro corrected altitude is retrieved from IO.
      PERF_SDD_07496_INT

      The ADC range flag shall be set to true only if all of the following conditions are valid
        - the aircraft pressure altitude is from -2000.00 ft to 50,000.00 ft.
        - the aircraft static air temperature is from -99.00 to 80.00 Celcius
        - the aircraft is airborne and
        - the aircraft CAS is from 0.0 kts to 450.0 kts.
        - the airacrft Mach is from 0.0 to 1.0 mach
        - the aircraft TAS is at or below 599.00 kts
        - the aircraft TAS is at or above 50.0 kts or the aircraft flight phase being takeoff or
          before with aircraft TAS is at or above 0.0 kts
      PERF_SDD_07497_INT

      The ADC/FG input data validity shall be set based on the validity of ADC range flag.
      PERF_SDD_07498_INT

      The predicted data of delta speed record shall be reset to false.
      The previous integration interval econ cas speed is invalidated.
      PERF_SDD_07499_INT


INPUT                                                                                                   VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
»    False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
»     True
```

```
 551   560 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
 552   561 Perf_Dpkg.Min_Gwt
           »    100.0
 553   562 Perf_Dpkg.Max_Gwt
           »    400.0
 554   563 Perf_Background_Dpkg.Flight_Plan_Type                        I
           » s_Active
 555   564 Perf_Background_Dpkg.Ats_Enable
           »     True
 556   565 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »  Takeoff
 557   566 Perf_Database_Dpkg.Psmmo
           »     0.45
 558   567 Perf_Background_Dpkg.Pszfw
           »    300.0
 559   568 Perf_Background_Dpkg.Psblockfuel
           »     50.0
 560   569 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
 561   570 Perf_Background_Dpkg.Psairborne
           »    False
 562   571 Perf_Background_Dpkg.Psautolat
           »     True
 563   572 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
 564   573 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
 565   574 Perf_Background_Dpkg.Psengout
           »     True
 566   575 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »    False
 567   576 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
 568   577 Perf_Dpkg.Repredict_Hm_Decel
           »     True
 569   578 Perf_Background_DPkg.Pshmdecel
           »     True
 570   579 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
 571   580 Perf_Ads_Dpkg.Fi_Enabled
           »    False
 572   581 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 573   582 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
 574   583 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
 575   584 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
 576   585 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
 577   586 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
 578   587 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
 579   588 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
 580   589 Perf_Background_Dpkg.Psappspdlat
           »     True
 581   590 Perf_Dpkg.Pcengoutprds
           »   Altpln
 582   591 Perf_Background_Dpkg.Pcpathref
           »   Onpath
 583   592 Guid_Ext_Dpkg.Va3Vertmde                                                                          Perf_Ext_Tp
           » kg.Vmspd
 584   593 Perf_Background_DPkg.Pscurcas
           »      5.0
 585   594 Perf_Background_DPkg.Pscurmach
           »      5.0
 586   595 Perf_Background_DPkg.Pscurtas
           »      5.0
 587   596 Perf_Background_Dpkg.Pcitin.Itinerary                                                                      No_I
           » tinerary
 588   597 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     True
 589   598 Perf_Background_Dpkg.Pstogwtval
           »    False
 590   599 Perf_Background_Dpkg.Pstogwt
           »     50.0
 591   600 Perf_Background_Dpkg.Pcgwind
           »  Invalid
 592   601 Perf_Background_Dpkg.Psgw
           »      0.0
 593   602 Perf_Dpkg.Gross_Weight.Status
           »    Valid
 594   603 Perf_Dpkg.Gross_Weight.Data
           »    150.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
  595    604 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
  596    605 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »    False
  597    606 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
  598    607 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    200.0
  599    608 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »    False
  600    609 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
  601    610 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
  602    611 Perf_Background_Dpkg.Psstpclbact
             »     True
  603    612 Perf_Background_Dpkg.Psstpdesact
             »     True
  604    613 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
  605    614 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »      0.0
  606    615 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
             »     0.65
  607    616 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
  608    617 Perf_Background_Dpkg.Pccuraltcstr.Valid
             »     True
  609    618 Perf_Background_Dpkg.Pcprebcalt.Valid
             »     True
  610    619 Perf_Background_Dpkg.Pcgmttime.Hour
             »        2
  611    620 Perf_Background_Dpkg.Pcgmttime.Minute
             »        2
  612    621 Perf_Background_Dpkg.Pcgmttime.Second
             »        2
  613    622 Perf_Background_Dpkg.Psinertvs
             »      5.0
  614    623 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
             »        0
  615    624 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
             »        2
  616    625 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
             »        0
```

```
 617    626 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
            »        2
 618    627 Perf_Ads_Dpkg.Pr_Enabled
            »    False
 619    628 ATC_DISCRETES_PKG:body.Adson_Flag
            »    False
 620    629 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
            »     true
 621    630 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
            »     true
 622    631 ^Noise_End_Alt_Status                                                                       Takeoff_Alt_Type
            » s.Active
 623    632 ^Noise_Speed_Val
            »     True
 624    633 ^Noise_TSPD.valid
            »     True
 625    634 ^Noise_TSPD.Data
            »    150.0
 626    635 ^Noise_End_Alt
            »    300.0
 627    636 ^Noise_Speed
            »    250.0
 628    637 ^Noise_Thrust
            »   Maxclb
 629    638 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
            »     True
 630    639 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
            »     True
 631    640 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
            »     21.0
 632    641 Perf_Background_Dpkg.Psorgalt
            »  36080.0
 633    642 Perf_Background_Dpkg.Noise_Data.Altitude.Data
            »      0.0
 634    643 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
            »    False
 635    644 Perf_Background_Dpkg.Noise_Data.Speed.Data
            »      0.0
 636    645 Perf_Background_Dpkg.Noise_Data.Speed.Valid
            »    False
 637    646 Perf_Background_Dpkg.Noise_Data.Tspd.Data
            »      0.0
 638    647 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
            »    False
 639   648 Perf_Background_Dpkg.Noise_Data.Thrust
           »  Drtnone
 640   649 Perf_Background_Dpkg.Pcfltphase
           »   Cruise
 641   650 Perf_Background_Dpkg.Psacalt
           »     50.0
 642   651 Perf_Background_Dpkg.Psacaltv
           »    False
 643   652 Perf_Background_Dpkg.Pstruetrkv
           »    False
 644   653 Perf_Background_Dpkg.Psvgrnd
           »      0.0
 645   654 Perf_Background_Dpkg.Psvgrndval
           »    False
 646   655 Perf_Background_Dpkg.Pcacposn.Data.Lat
           »    100.0
 647   656 Perf_Background_Dpkg.Pcacposn.Data.Lon
           »    100.0
 648   657 Perf_Background_Dpkg.Pcacposn.Valid
           »    false
 649   658 Perf_Background_Dpkg.Pstruetrack
           »      0.2
 650   659 Perf_Background_Dpkg.Pswindbrg
           »    150.0
 651   660 Perf_Background_Dpkg.Pswindmag
           »    130.0
 652   661 Perf_Background_Dpkg.Pswindval
           »    false
 653   662 Fmcs_Partition_Data_Pkg.Ops_Time.Hour
           »        1
 654   663 Fmcs_Partition_Data_Pkg.Ops_Time.Minute
           »        1
 655   664 Fmcs_Partition_Data_Pkg.Ops_Time.Second
           »        1
 656   665 Perf_Dpkg.Psnumengout
           »        1
 657   666 Perf_Background_Dpkg.Psvgonpath
           »     true
 658   667 Perf_Background_Dpkg.Pscrzalt.data
           »     10.0
 659   668 Perf_Background_Dpkg.Pscrzalt.Valid
           »    false
 660   669 Perf_Background_Dpkg.Psfinaldes
           »    false
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 661   670 Perf_Background_Dpkg.Pcspeedmode                                                                              Perf_Ext_Tpk
           » g.Vmecon
 662   671 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas
           »    230.0
 663   672 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt
           »  15000.0
 664   673 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type                                                      Vg_Ext_Tpkg.Clb
           » _Spd_Lim
 665   674 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident                                                                         "
           » ABCD   "
 666   675 Perf_Background_Dpkg.Pcactorsec
           »   Active
 667   676 Perf_Background_Dpkg.Alt_Curr_Baro.Valid
           »    False
 668   677 Perf_Background_Dpkg.Alt_Curr_Baro.Data
           »     0.00
 669   678 Guid_Ext_Dpkg.Galxtk
           »     2.49
 670   679 Guid_Checkpoint_Resynch_Dpkg.Vc3Cstrduald.Isbdatablock.Cstraltlim
           »     true
 671   680 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
           »     true
 672   681 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active
           »     true
 673   682 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
           »     2100
 674   683 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
           »     True
 675   684 Perf_Background_Dpkg.Speed_Annunciation.Cas
           »      0.0
 676   685 Perf_Background_Dpkg.Speed_Annunciation.Alt
           »      0.0
 677   686 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type                                                          Vg_Ext_Tpkg
           » .Invalid
 678   687 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                                                                        "
           »        "
 679   688 Perf_Background_Dpkg.Flex_Isadev.Data
           »      5.0
 680   689 Perf_Background_Dpkg.Ac_Crosstrack_Error
           »      0.0
 681   690 Perf_Background_Dpkg.Early_Descent_From_Level
           »    false
 682   691 Perf_Background_Dpkg.Altholdmode
           »    false
```

```
  683    692 CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Valid
             »     True
  684    693 CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Data
             »    23.20
  685    694 Perf_Background_Dpkg.Pspressalt
             »      0.0
  686    695 Perf_Background_Dpkg.Pscurtasvalid
             »    false
  687    696
  688    697
  689    698  define Get_Maxop_Delta_Called := False
  690    699  define Get_Def_Thrust_Reduction_Alt_Called := False
  691    700  define Get_Cruise_Alt_Called := False
  692    701  define Get_Ac_Config_Called := False
  693    702
  694    703
  695    704 INPUT                                                                                             VALUE
  696    705 -------------------------------------------------------------------------------------------------  ------------------
             » --------
  697    706 Computoldtgt
             »     True
  698    707 Curspdsval
             »    False
  699    708 Perf_Background_Dpkg.Psfirstpass
             »    False
  700    709 Perf_Background_Dpkg.Psonofrstpas
             »    False
  701    710 Perf_Background_Dpkg.Psftpbwritok
             »    False
  702    711 Perf_Background_Dpkg.Psvsact
             »     True
  703    712 Perf_Background_Dpkg.Psfpaact
             »     True
  704    713 Perf_Background_Dpkg.Pslvlatbcalt
             »     True
  705    714 Perf_Integration_Dpkg.Pslvlblwpth
             »     True
  706    715 Perf_Background_Dpkg.Psfi_Possble
             »     True
  707    716 Perf_Background_Dpkg.On_Icao_Leg_Decel
             »     True
  708    717 Perf_Background_Dpkg.Psignorehm
             »     True
  709    718 Perf_Integration_Dpkg.Pcoldwspdchg                                                                  Ica
```

```
» olimited
Perf_Background_Dpkg.Adc_Fg_Valid
»    False
Perf_Background_Dpkg.Psenginesoff
»     True
Perf_Dpkg.Pcdelspdrec.Predicted
»     True
Perf_Background_Dpkg.Pcoldeconcas.Valid
»     True
Perf_Dpkg.takeoff_gwt.valid
»     True
Perf_Dpkg.takeoff_gwt.data
»    400.0


 define Get_Def_Thrust_Reduction_Alt_Called   := True
 define Get_Def_Thrust_Reduction_Alt_Called   := True


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Thredalt.Data(Fprequestrec_Types.Takeoff).Altitude
»    10001


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Computoldtgt                                                                  False          (N/A)
»    FALSE  P
Curspdsval                                                                     True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Psfirstpass                                               True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Psonofrstpas                                              True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Psftpbwritok                                              True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Psvsact                                                  False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Psfpaact                                                 False          (N/A)
»    FALSE  P
```

```
 736   745 Perf_Background_Dpkg.Pslvlatbcalt                                    False        (N/A)
           »    FALSE  P
 737   746 Perf_Integration_Dpkg.Pslvlblwpth                                    False        (N/A)
           »    FALSE  P
 738   747 Perf_Background_Dpkg.Psfi_Possble                                    False        (N/A)
           »    FALSE  P
 739   748 Perf_Background_Dpkg.On_Icao_Leg_Decel                               False        (N/A)
           »    FALSE  P
 740   749 Perf_Background_Dpkg.Psignorehm                                      False        (N/A)
           »    FALSE  P
 741   750 Perf_Integration_Dpkg.Pcoldwspdchg                            Returntoecon        (N/A)           RETU
           » RNTOECON  P
 742   751 Perf_Background_Dpkg.Psacalt                                         100.0        0.001           1.0
           » 0000E+02  P
 743   752 Perf_Background_Dpkg.Psacaltv                                         True        (N/A)
           »     TRUE  P
 744   753 Perf_Background_Dpkg.Pcacposn.Data.Lat                               150.0        0.001           1.5
           » 0000E+02  P
 745   754 Perf_Background_Dpkg.Pcacposn.Data.Lon                               120.0        0.001           1.2
           » 0000E+02  P
 746   755 Perf_Background_Dpkg.Pcacposn.Valid                                   true        (N/A)
           »     TRUE  P
 747   756 Perf_Background_Dpkg.Pstruetrack                                       0.1        0.001           1.0
           » 0000E-01  P
 748   757 Perf_Background_Dpkg.Pstruetrkv                                       True        (N/A)
           »     TRUE  P
 749   758 Perf_Background_Dpkg.Pswindbrg                                       200.0        0.001           2.0
           » 0000E+02  P
 750   759 Perf_Background_Dpkg.Pswindmag                                       100.0        0.001           1.0
           » 0000E+02  P
 751   760 Perf_Background_Dpkg.Pswindval                                        true        (N/A)
           »     TRUE  P
 752   761 Perf_Background_Dpkg.Psvgrnd                                           1.0        0.001           1.0
           » 0000E+00  P
 753   762 Perf_Background_Dpkg.Psvgrndval                                       True        (N/A)
           »     TRUE  P
 754   763
 755   764
 756   765 INPUT                                                                                           VALUE
 757   766 -----------------------------------------------------------------------------------------  ------------------
           » --------
 758   767 Eng_Healthy1_Inboard
           »     True
 759   768 Eng_Healthy1_Outboard
```

```
              »     True
  760   769 Eng_Healthy2_Inboard
              »     True
  761   770 Eng_Healthy2_Outboard
              »     True
  762   771 Tla_Ecu1_Inboard.Data
              »      1.0
  763   772 Tla_Ecu1_Inboard.Valid
              »     True
  764   773 Tla_Ecu1_Outboard.Data
              »      1.0
  765   774 Tla_Ecu1_Outboard.Valid
              »     True
  766   775 Tla_Ecu2_Inboard.Data
              »      1.0
  767   776 Tla_Ecu2_Inboard.Valid
              »     True
  768   777 Tla_Ecu2_Outboard.Data
              »      1.0
  769   778 Tla_Ecu2_Outboard.Valid
              »     True
  770   779
  771   780
  772   781 OUTPUT                                                              EXPECTED                TOLERANCE              ACTUAL
              »           P/F
  773   782 ----------------------------------------------------  ----------------------------  -------------  ------------------
              » --------  ----
  774   783 Eng_Healthy1_Inboard                                                             False          (N/A)
              »    FALSE  P
  775   784 Eng_Healthy1_Outboard                                                             True          (N/A)
              »     TRUE  P
  776   785 Eng_Healthy2_Inboard                                                             False          (N/A)
              »    FALSE  P
  777   786 Eng_Healthy2_Outboard                                                             True          (N/A)
              »     TRUE  P
  778   787 Tla_Ecu1_Inboard.Data                                                              0.0          0.001                0.0
              » 0000E+00  P
  779   788 Tla_Ecu1_Inboard.Valid                                                           False          (N/A)
              »    FALSE  P
  780   789 Tla_Ecu1_Outboard.Data                                                             0.0          0.001                0.0
              » 0000E+00  P
  781   790 Tla_Ecu1_Outboard.Valid                                                          False          (N/A)
              »    FALSE  P
  782   791 Tla_Ecu2_Inboard.Data                                                              0.0          0.001                0.0
```

```
               » 0000E+00  P
  783     792  Tla_Ecu2_Inboard.Valid                                                      False          (N/A)
               »    FALSE  P
  784     793  Tla_Ecu2_Outboard.Data                                                        0.0          0.001                0.0
               » 0000E+00  P
  785     794  Tla_Ecu2_Outboard.Valid                                                     False          (N/A)
               »    FALSE  P
  786     795  Perf_Background_Dpkg.Pcfltphase                                           Takeoff          (N/A)
               »  TAKEOFF  P
  787     796  Perf_Background_Dpkg.Pcgmttime.Hour                                           1            (N/A)
               »        1  P
  788     797  Perf_Background_Dpkg.Pcgmttime.Minute                                         1            (N/A)
               »        1  P
  789     798  Perf_Background_Dpkg.Pcgmttime.Second                                         1            (N/A)
               »        1  P
  790     799
  791     800
  792     801  INPUT                                                                                                   VALUE
  793     802  ---------------------------------------------------------------------------------------  -----------------
               » --------
  794     803  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
               »     True
  795     804  Perf_Background_Dpkg.Vman_Fe.Data
               »      1.0
  796     805  Perf_Background_Dpkg.Vman_Fe.Valid
               »     True
  797     806  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
               »    False
  798     807  Airborne_Dat
               »     True
  799     808
  800     809
  801     810  OUTPUT                                                           EXPECTED              TOLERANCE              ACTUAL
               »           P/F
  802     811  ---------------------------------------------------  ----------------------------  -------------  -----------------
               » --------  ----
  803     812  Perf_Background_Dpkg.Vman_Fe.Data                                             0.0          0.001                0.0
               » 0000E+00  P
  804     813  Perf_Background_Dpkg.Vman_Fe.Valid                                          False          (N/A)
               »    FALSE  P
  805     814  Perf_Background_Dpkg.Psairborne                                              True          (N/A)
               »     TRUE  P
  806     815  Perf_Background_Dpkg.Psautolat                                              False          (N/A)
               »    FALSE  P
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
   807    816 Perf_Background_Dpkg.Psengout                                                 False          (N/A)
              »    FALSE  P
   808    817 Perf_Background_Dpkg.Psenginesoff                                             False          (N/A)
              »    FALSE  P
   809    818
   810    819
   811    820  define Get_Cruise_Alt_Called   := True
   812    821  define Get_Cruise_Alt_Called   := True
   813    822
   814    823
   815    824 INPUT                                                                                                      VALUE
   816    825 --------------------------------------------------------------------------------------------------  ------------------
              » --------
   817    826 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Sat
              »     True
   818    827 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
              »     True
   819    828 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
              »     True
   820    829 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
              »     True
   821    830 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
              »     True
   822    831 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side1
              »     True
   823    832 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side2
              »     True
   824    833 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side1
              »     True
   825    834 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side2
              »     True
   826    835
   827    836
   828    837 OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
              »           P/F
   829    838 ----------------------------------------------------  -----------------------------  -------------  ------------------
              » --------  ----
   830    839 Perf_Background_Dpkg.Adc_Fg_Valid                                                  True          (N/A)
              »     TRUE  P
   831    840 Perf_Background_Dpkg.Pspressalt                                                  2100.0          0.001                 2.1
              » 0000E+03  P
   832    841 Perf_Background_Dpkg.Pscurcas                                                      0.0          0.001                 0.0
              » 0000E+00  P
   833    842 Perf_Background_Dpkg.Pscurmach                                                     0.0          0.001                 0.0
```

```
            » 0000E+00  P
  834   843 Perf_Background_Dpkg.Pscurtas                                                   0.0          0.001                 0.0
            » 0000E+00  P
  835   844 Perf_Background_Dpkg.Pscurtasvalid                                             True          (N/A)
            »     TRUE  P
  836   845 Perf_Dpkg.Psnumengout                                                             0          (N/A)
            »        0  P
  837   846 Perf_Background_Dpkg.Psvgonpath                                               false          (N/A)
            »    FALSE  P
  838   847 Perf_Background_Dpkg.Pscrzalt.data                                              5.0          0.001                 5.0
            » 0000E+00  P
  839   848 Perf_Background_Dpkg.Pscrzalt.Valid                                            True          (N/A)
            »     TRUE  P
  840   849 Perf_Dpkg.Pcdelspdrec.Predicted                                               False          (N/A)
            »    FALSE  P
  841   850 Perf_Background_Dpkg.Pcoldeconcas.Valid                                       False          (N/A)
            »    FALSE  P
  842   851
  843   852
  844   853 INPUT                                                                                                          VALUE
  845   854 --------------------------------------------------------------------------------------------------  ------------------
            » --------
  846   855 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.PRIM_Voted_Inertial_Vert_Speed
            »     True
  847   856 Io_IRS_Sel_Pkg.The_Selected_IRS.all.Io_IRS_MSG2_Validity_Rec.Inertial_Vert_Speed
            »     True
  848   857 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.PRIM_Voted_Inertial_Vert_Speed
            »      1.0
  849   858
  850   859
  851   860 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
  852   861 ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
  853   862 Adc_In_Range                                                                   True          (N/A)
            »     TRUE  P
  854   863 Perf_Background_Dpkg.Adc_Fg_Valid                                              True          (N/A)
            »     TRUE  P
  855   864 Perf_Background_Dpkg.Psinertvs                                                  1.0          0.001                 1.0
            » 0000E+00  P
  856   865
  857   866
  858   867  define Get_Ac_Config_Called   := True
  859   868  define Get_Ac_Config_Called   := True
```

```


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcspeedmode                                Perf_Ext_Tpkg.Vmspd          (N/A)
»    VMSPD  P
Perf_Background_Dpkg.Psfinaldes                                                true          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Pcacconfig                                                   0          (N/A)
»        0  P


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Psgrndotdes
»     True
Perf_Background_Dpkg.Psstpclbact
»     True
Perf_Background_Dpkg.Psstpdesact
»     True
Perf_Background_Dpkg.Psengout
»    False
Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes
»    False
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
»    False
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
»    False


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Integration_Dpkg.Pcairbrakes                                            Zeroab          (N/A)
»   ZEROAB  P
Perf_Background_Dpkg.Psgrndotdes                                              False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Psstpclbact                                              False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Psstpdesact                                              False          (N/A)
```

```
           |»    FALSE  P
  886   895|
  887   896|
  888   897|INPUT                                                                                                          VALUE
  889   898|--------------------------------------------------------------------------------------------------  ------------------
           |» --------
  890   899|Curspdsval
           |»    False
  891   900|Perf_Background_Dpkg.Pcmanspd.Speed.CAS
           |»      1.0
  892   901|Perf_Background_Dpkg.Pcmanspd.CASVALID
           |»     True
  893   902|Perf_Background_Dpkg.Pcmanspd.Speed.MACH
           |»      1.0
  894   903|Perf_Background_Dpkg.Pcmanspd.MACHVALID
           |»     True
  895   904|Perf_Background_Dpkg.Pccuraltcstr.Data
           |»      1.0
  896   905|Perf_Background_Dpkg.Pccuraltcstr.Valid
           |»     True
  897   906|Perf_Background_Dpkg.Pccuraltcstr.Legidx
           |»        1
  898   907|Perf_Background_Dpkg.Pccuraltcstr.Lgidval
           |»     True
  899   908|Perf_Background_Dpkg.Pccuraltcstr.Usevga
           |»     True
  900   909|Perf_Background_Dpkg.Pccuraltcstr.Vgaidx
           |»        1
  901   910|Perf_Background_Dpkg.Pcprebcalt.Data
           |»      1.0
  902   911|Perf_Background_Dpkg.Pcprebcalt.Valid
           |»     True
  903   912|Perf_Background_Dpkg.Pc3rdalt.Data
           |»      1.0
  904   913|Perf_Background_Dpkg.Pc3rdalt.Valid
           |»     True
  905   914|Perf_Background_Dpkg.Pslcautoctl
           |»     True
  906   915|Perf_Background_Dpkg.Vert_Auto_Mode
           |»     True
  907   916|
  908   917|
  909   918|OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
           |»           P/F
```

```
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcmanspd.Speed.CAS                                         0.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pcmanspd.CASVALID                                        False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pcmanspd.Speed.MACH                                        0.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pcmanspd.MACHVALID                                       False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pccuraltcstr.Data                                          0.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pccuraltcstr.Valid                                       False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pccuraltcstr.Legidx                                          0          (N/A)
»        0  P
Perf_Background_Dpkg.Pccuraltcstr.Lgidval                                     False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pccuraltcstr.Usevga                                      False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pccuraltcstr.Vgaidx                                          0          (N/A)
»        0  P
Perf_Background_Dpkg.Pcprebcalt.Data                                            0.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pcprebcalt.Valid                                         False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pc3rdalt.Data                                              0.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pc3rdalt.Valid                                           False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pslcautoctl                                              False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Vert_Auto_Mode                                           False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Noise_Data.Tspd.Data                                     150.0          0.001                 1.5
» 0000E+02  P
Perf_Background_Dpkg.Noise_Data.Tspd.Valid                                     True          (N/A)
»     TRUE  P


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Lim_Max_Op_Cas
```

```
             »      5.0
  934   943  Perf_Background_Dpkg.Lim_Max_Op_Mach
             »      0.0
  935   944
  936   945
  937   946   define Get_Maxop_Delta_Called   := True
  938   947   define Get_Maxop_Delta_Called   := True
  939   948
  940   949
  941   950  OUTPUT                                                           EXPECTED                TOLERANCE              ACTUAL
             »           P/F
  942   951  ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
  943   952  Rwy_Temp                                                                   -56.481            0.001                -5.6
             » 4817E+01  P
  944   953  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec                              True            (N/A)
             »     TRUE  P
  945   954  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec                              True            (N/A)
             »     TRUE  P
  946   955  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec                              True            (N/A)
             »     TRUE  P
  947   956  Perf_Background_Dpkg.Pstogwtval                                                True            (N/A)
             »     TRUE  P
  948   957  Perf_Background_Dpkg.Pstogwt                                                  400.0            0.001                 4.0
             » 0000E+02  P
  949   958  Perf_Background_Dpkg.Pcgwind                                                  Valid            (N/A)
             »    VALID  P
  950   959  Perf_Background_Dpkg.Psgw                                                     400.0            0.001                 4.0
             » 0000E+02  P
  951   960  Perf_Dpkg.Pcengoutprds                                                  ENGOUTNOTVAL            (N/A)                ENGO
             » UTNOTVAL  P
  952   961  CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                 False            (N/A)
             »    FALSE  P
  953   962  Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                       True            (N/A)
             »     TRUE  P
  954   963  Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                         True            (N/A)
             »     TRUE  P
  955   964  Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                        True            (N/A)
             »     TRUE  P
  956   965  Perf_Background_Dpkg.Flex_Isadev.Data                                     77.481696            0.001                 7.7
             » 4817E+01  P
  957   966  Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                 True            (N/A)
             »     TRUE  P
  958   967  Perf_Background_Dpkg.Noise_Data.Altitude.Data                                 300.0            0.001                 3.0
```

```
               » 0000E+02  P
  959    968 Perf_Background_Dpkg.Noise_Data.Speed.Valid                                       True          (N/A)
               »     TRUE  P
  960    969 Perf_Background_Dpkg.Noise_Data.Speed.Data                                       250.0          0.001              2.5
               » 0000E+02  P
  961    970 Perf_Background_Dpkg.Speed_Annunciation.Cas                                      230.0          0.001              2.3
               » 0000E+02  P
  962    971 Perf_Background_Dpkg.Speed_Annunciation.Alt                                    15000.0          0.001              1.5
               » 0000E+04  P
  963    972 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type      Vg_Ext_Tpkg.Clb_Spd_Lim          (N/A)              CLB
               » _SPD_LIM  P
  964    973 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                              "ABCD   "          (N/A)                "
               » ABCD   "  P
  965    974 Get_Maxop_Delta_Called                                                            True          (N/A)
               »     TRUE  P
  966    975 Get_Def_Thrust_Reduction_Alt_Called                                               True          (N/A)
               »     TRUE  P
  967    976 Get_Cruise_Alt_Called                                                             True          (N/A)
               »     TRUE  P
  968    977 Get_Ac_Config_Called                                                              True          (N/A)
               »     TRUE  P
  969    978 Perf_Background_Dpkg.Lim_Max_Op_Cas                                                0.0          0.001              0.0
               » 0000E+00  P
  970    979 Perf_Background_Dpkg.Lim_Max_Op_Mach                                              0.45          0.001              4.5
               » 0000E-01  P
  971    980 Perf_Background_Dpkg.Noise_Data.Thrust                                          Maxclb          (N/A)
               »   MAXCLB  P
  972    981 Perf_Background_Dpkg.Ac_Crosstrack_Error                                          2.49          0.001              2.4
               » 9000E+00  P
  973    982 Perf_Background_Dpkg.Early_Descent_From_Level                                     true          (N/A)
               »     TRUE  P
  974    983 Perf_Background_Dpkg.Altholdmode                                                  true          (N/A)
               »     TRUE  P
  975    984 Perf_Background_Dpkg.Alt_Curr_Baro.Valid                                          True          (N/A)
               »     TRUE  P
  976    985 Perf_Background_Dpkg.Alt_Curr_Baro.Data                                          23.20          0.001              2.3
               » 2000E+01  P
  977    986
  978    987
  979    988 ====> All 121 Comparisons Passed <====
  980    989
  981    990
  982    991 TESTID: 2
  983    992
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
  984   993      Verify that if an engine-out condition exists and current flightphase is TO, then engine-out predictions flag is s
             » et to
  985   994      NOPREDS.  Verify that when Pcitin is No_Itinerary that descent path is not invalidated.
  986   995      PERF_SDD_0410 (PERF_SRD_1554_A3XX, PERF_SRD_1584_A3XX), PERF_SDD_3317_INT, PERF_SDD_0417_INT,
  987   996       when the working flight plan is  Is_Active, a variety of following global data be retrieved
  988   997       - Airborne flag
  989   998         when Io_Fms_Aircraft_State_Dpkg.Is_Airborne is false
  990   999       - when Io_Common_Irs_Dpkg.Sel_Src_Inertial_Vert_Speed is invalid,  A/C inertial vertical speed set to 0.0
  991  1000       - when Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Active is not valid, Altitude Hold mode flag status is not from
             » FMGC via the interface
  992  1001      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
  993  1002        PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
  994  1003        PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100,PERF_SRD_6005_INT)
  995  1004
  996  1005      The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
  997  1006      working flight plan.
  998  1007      PERF_SDD_4328 (PERF_SRD_10166_INT)
  999  1008
 1000  1009      The airborne flag(Psairborne) shall be set when
 1001  1010          - the Is_Airborne flag from IO is valid and
 1002  1011          - the current flight phase is not in preflight or done.
 1003  1012      PERF_SDD_07495_INT
 1004  1013
 1005  1014      The ADC/FG input data validity(Adc_Fg_Valid) shall be determined from the validity of
 1006  1015        - Static Air Temperature
 1007  1016        - Pressure Altitude
 1008  1017        - CAS, TAS, Mach (here the aircraft is not airborne and the validity can't perform) and
 1009  1018      For the valid ADC/FG input data, the following data are retrieved from IO
 1010  1019        - A/C Pressure altitude
 1011  1020        - A/C CAS
 1012  1021        - A/C Mach
 1013  1022        - A/C TAS
 1014  1023      Also if the baro corrected altitude is valid, then the current baro corrected altitude is retrieved from IO.
 1015  1024      PERF_SDD_07496_INT
 1016  1025
 1017  1026      The ADC range flag shall be set to false when not all of the following conditions are valid
 1018  1027        - the aircraft pressure altitude is from -2000.00 ft to 50,000.00 ft.
 1019  1028        - the aircraft static air temperature is from -99.00 to 80.00 Celcius
 1020  1029        - the aircraft is airborne and
 1021  1030        - the aircraft CAS is from 0.0 kts to 450.0 kts.
 1022  1031        - the airacrft Mach is from 0.0 to 1.0 mach
 1023  1032        - the aircraft TAS is at or below 599.00 kts
 1024  1033        - the aircraft TAS is at or above 50.0 kts or the aircraft flight phase being takeoff or
 1025  1034          before with aircraft TAS is at or above 0.0 kts
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 1026   1035     PERF_SDD_07497_INT
 1027   1036
 1028   1037     The ADC/FG input data validity shall be set based on the validity of ADC range flag.
 1029   1038     PERF_SDD_07498_INT
 1030   1039
 1031   1040     When the flight phase is descent or approach, the descent path reference shall be set to
 1032   1041     the guidance descent path reference(Va3pathref).
 1033   1042     PERF_SDD_07500_INT
 1034   1043
 1035   1044     If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is
 1036   1045     not Secondary or engines are on, the aircraft gross weight shall be set to the following:
 1037   1046       - Aircraft GW from the Performance Weights function, if the flight phase is other than takeoff or before,
 1038   1047         or the aircraft gross weight or the Take Off gross weight being invalid
 1039   1048     The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
 1040   1049     PERF_SDD_07501_INT
 1041   1050
 1042   1051
 1043   1052 INPUT                                                                                                  VALUE
 1044   1053 ---------------------------------------------------------------------------------------------------  ------------------
             » --------
 1045   1054 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
             »    False
 1046   1055 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
             »    False
 1047   1056 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
             »    False
 1048   1057 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
             »    False
 1049   1058 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
             »    False
 1050   1059 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
             »     True
 1051   1060 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
             »     True
 1052   1061 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
             »     True
 1053   1062 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
             »     True
 1054   1063 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
             »     True
 1055   1064 Perf_Dpkg.Min_Gwt
             »    100.0
 1056   1065 Perf_Dpkg.Max_Gwt
             »    400.0
```

```
1057  1066 Perf_Background_Dpkg.Flight_Plan_Type                                          I
           » s_Active
1058  1067 Perf_Background_Dpkg.Psignorehm
           »     True
1059  1068 Perf_Background_Dpkg.Pcfltphase
           »  Takeoff
1060  1069 Perf_Background_Dpkg.Ats_Enable
           »     True
1061  1070 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »  Takeoff
1062  1071 Perf_Background_Dpkg.Psacalt
           »  10000.0
1063  1072 Perf_Database_Dpkg.Psmmo
           »     0.45
1064  1073 Perf_Background_Dpkg.Pszfw
           »    300.0
1065  1074 Perf_Background_Dpkg.Psblockfuel
           »     50.0
1066  1075 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
1067  1076 Perf_Background_Dpkg.Psairborne
           »     True
1068  1077 Perf_Background_Dpkg.Psautolat
           »    False
1069  1078 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
1070  1079 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
1071  1080 Perf_Background_Dpkg.Psengout
           »    False
1072  1081 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
1073  1082 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
1074  1083 Perf_Dpkg.Repredict_Hm_Decel
           »     True
1075  1084 Perf_Background_DPkg.Pshmdecel
           »     True
1076  1085 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
1077  1086 Perf_Ads_Dpkg.Fi_Enabled
           »    False
1078  1087 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1079  1088  Perf_Background_Dpkg.Pcholdflags.Manhmwarn
            »     True
1080  1089  Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
            »     True
1081  1090  Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
            »     True
1082  1091  Perf_Background_Dpkg.Pcholdflags.Hmdistval
            »     True
1083  1092  Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
            »     True
1084  1093  Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
            »     True
1085  1094  Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
            »     True
1086  1095  Perf_Background_Dpkg.Psappspdlat
            »     True
1087  1096  Perf_Dpkg.Pcengoutprds
            »   Altpln
1088  1097  Perf_Background_Dpkg.Pcpathref
            »   Nopath
1089  1098  Guid_Ext_Dpkg.Va3Vertmde                                                                           Perf_Ext_Tp
            » kg.Vmspd
1090  1099  Perf_Background_DPkg.Pscurcas
            »      5.0
1091  1100  Perf_Background_DPkg.Pscurmach
            »      5.0
1092  1101  Perf_Background_DPkg.Pscurtas
            »      5.0
1093  1102  Perf_Background_Dpkg.Pcitin.Itinerary                                                                     No_I
            » tinerary
1094  1103  Perf_Despath_Dpkg.Pcdespath.Vgavalid
            »     True
1095  1104  Perf_Background_Dpkg.Pstogwtval
            »    False
1096  1105  Perf_Background_Dpkg.Pstogwt
            »     50.0
1097  1106  Perf_Background_Dpkg.Pcgwind
            »  Invalid
1098  1107  Perf_Background_Dpkg.Psgw
            »      0.0
1099  1108  Perf_Dpkg.Gross_Weight.Status
            »    Valid
1100  1109  Perf_Dpkg.Gross_Weight.Data
            »    150.0
```

```
 1101   1110 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 1102   1111 Perf_Background_Dpkg.Pcacconfig
             »        5
 1103   1112 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »    False
 1104   1113 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
 1105   1114 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    200.0
 1106   1115 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »    False
 1107   1116 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 1108   1117 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 1109   1118 Perf_Background_Dpkg.Psstpclbact
             »     True
 1110   1119 Perf_Background_Dpkg.Psstpdesact
             »     True
 1111   1120 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
 1112   1121 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »      0.0
 1113   1122 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
             »     0.65
 1114   1123 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
 1115   1124 Perf_Background_Dpkg.Pccuraltcstr.Valid
             »     True
 1116   1125 Perf_Background_Dpkg.Pcprebcalt.Valid
             »     True
 1117   1126 Perf_Background_Dpkg.Pcgmttime.Hour
             »        1
 1118   1127 Perf_Background_Dpkg.Pcgmttime.Minute
             »        1
 1119   1128 Perf_Background_Dpkg.Pcgmttime.Second
             »        1
 1120   1129 Perf_Background_Dpkg.Psinertvs
             »      5.0
 1121   1130 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
             »        0
 1122   1131 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
             »        2
```

```
1123  1132 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
1124  1133 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
1125  1134 Perf_Ads_Dpkg.Pr_Enabled
           »    False
1126  1135 ATC_DISCRETES_PKG:body.Adson_Flag
           »    False
1127  1136 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »     true
1128  1137 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »     true
1129  1138 ^Noise_End_Alt_Status                                                                 Takeoff_Alt_Type
           » s.Active
1130  1139 ^Noise_Speed_Val
           »     True
1131  1140 Perf_Background_Dpkg.Pcactorsec                                                                     T
           » emporary
1132  1141 CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Valid
           »    False
1133  1142 CTP_A350_PERF_BKGND_GET_BK_DATA.Parameter_Data
           »    23.20
1134  1143 Perf_Background_Dpkg.Alt_Curr_Baro.Valid
           »    False
1135  1144 Perf_Background_Dpkg.Alt_Curr_Baro.Data
           »     0.00
1136  1145 Guid_Checkpoint_Resynch_Dpkg.Vc3Cstrduald.Isbdatablock.Cstraltlim
           »    false
1137  1146 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
           »    false
1138  1147 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active
           »     true
1139  1148 Perf_Background_Dpkg.Adc_Fg_Valid
           »     True
1140  1149 Perf_Background_Dpkg.Early_Descent_From_Level
           »     True
1141  1150 Perf_Background_Dpkg.Altholdmode
           »     True
1142  1151 Perf_Dpkg.takeoff_gwt.valid
           »     True
1143  1152 Perf_Dpkg.takeoff_gwt.data
           »    400.0
1144  1153 Airborne_Dat
           »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1145  1154
1146  1155
1147  1156  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
1148  1157  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
1149  1158  Perf_Background_Dpkg.Psairborne                                               False          (N/A)
            »    FALSE  P
1150  1159
1151  1160
1152  1161  INPUT                                                                                                          VALUE
1153  1162  --------------------------------------------------------------------------------------------------  ------------------
            » --------
1154  1163  Perf_Background_Dpkg.Pcfltphase
            »  Descent
1155  1164
1156  1165
1157  1166  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
1158  1167  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
1159  1168  Perf_Background_Dpkg.Pcpathref                                          INVALIDPATH          (N/A)                 INV
            » ALIDPATH  P
1160  1169
1161  1170
1162  1171  INPUT                                                                                                          VALUE
1163  1172  --------------------------------------------------------------------------------------------------  ------------------
            » --------
1164  1173  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Sat
            »     True
1165  1174  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
            »    False
1166  1175  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
            »    False
1167  1176  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
            »    False
1168  1177  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
            »    False
1169  1178  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side1
            »    False
1170  1179  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Mach_Side2
            »    False
1171  1180  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side1
            »    False
```

```
1172  1181  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side2
            »    False
1173  1182
1174  1183
1175  1184  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
1176  1185  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
1177  1186  Perf_Background_Dpkg.Adc_Fg_Valid                                             False          (N/A)
            »    FALSE  P
1178  1187
1179  1188
1180  1189  INPUT                                                                                                          VALUE
1181  1190  --------------------------------------------------------------------------------------------------  ------------------
            » --------
1182  1191  Perf_Background_Dpkg.Adc_Fg_Valid
            »     True
1183  1192  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
            »     81.0
1184  1193  Perf_Background_Dpkg.Psairborne
            »    False
1185  1194
1186  1195
1187  1196  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
1188  1197  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
1189  1198  Adc_In_Range                                                                  False          (N/A)
            »    FALSE  P
1190  1199  Perf_Background_Dpkg.Adc_Fg_Valid                                             False          (N/A)
            »    FALSE  P
1191  1200
1192  1201
1193  1202  INPUT                                                                                                          VALUE
1194  1203  --------------------------------------------------------------------------------------------------  ------------------
            » --------
1195  1204  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.PRIM_Voted_Inertial_Vert_Speed
            »    False
1196  1205  Io_IRS_Sel_Pkg.The_Selected_IRS.all.Io_IRS_MSG2_Validity_Rec.Inertial_Vert_Speed
            »    False
1197  1206  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.PRIM_Voted_Inertial_Vert_Speed
            »      1.0
1198  1207
1199  1208
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1200  1209 OUTPUT                                                          EXPECTED                TOLERANCE              ACTUAL
           »           P/F
1201  1210 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
1202  1211 Perf_Background_Dpkg.Psinertvs                                             0.0            0.001                   0.0
           » 0000E+00  P
1203  1212 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                           False            (N/A)
           »    FALSE  P
1204  1213 Perf_Background_Dpkg.Noise_Data.Speed.Valid                              False            (N/A)
           »    FALSE  P
1205  1214 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec                          True            (N/A)
           »     TRUE  P
1206  1215 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec                          True            (N/A)
           »     TRUE  P
1207  1216 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec                          True            (N/A)
           »     TRUE  P
1208  1217 Perf_Background_Dpkg.Pstogwtval                                           True            (N/A)
           »     TRUE  P
1209  1218 Perf_Background_Dpkg.Pstogwt                                            400.0            0.001                   4.0
           » 0000E+02  P
1210  1219 Perf_Background_Dpkg.Pcgwind                                            Valid            (N/A)
           »    VALID  P
1211  1220 Perf_Background_Dpkg.Psgw                                               150.0            0.001                   1.5
           » 0000E+02  P
1212  1221 Perf_Dpkg.Pcengoutprds                                                NOPREDS            (N/A)
           »  NOPREDS  P
1213  1222 Perf_Despath_Dpkg.Pcdespath.Vgavalid                                      True            (N/A)
           »     TRUE  P
1214  1223 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                            False            (N/A)
           »    FALSE  P
1215  1224 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                  True            (N/A)
           »     TRUE  P
1216  1225 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                    True            (N/A)
           »     TRUE  P
1217  1226 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                  True            (N/A)
           »     TRUE  P
1218  1227 Perf_Background_Dpkg.Early_Descent_From_Level                            false            (N/A)
           »    FALSE  P
1219  1228 Perf_Background_Dpkg.Altholdmode                                         false            (N/A)
           »    FALSE  P
1220  1229 Perf_Background_Dpkg.Alt_Curr_Baro.Valid                                 False            (N/A)
           »    FALSE  P
1221  1230 Perf_Background_Dpkg.Alt_Curr_Baro.Data                                  0.00            0.001                   0.0
           » 0000E+00  P
```

```


====> All 25 Comparisons Passed <=====


TESTID: 3

    Verify that if an engine-out condition exists and current flightphase is Goaround, then the engine-out predictions
»  flag
    is set to NOPREDS.  Verify that when pcitin is Fuel_Plan_Fpln_Preds that descent path is invalidated.
    PERF_SDD_0417_INT, PERF_SDD_0418_INT, PERF_SDD_3105 (PERF_SRD_1919)
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
     PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
     PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
    PERF_SDD_0410(PERF_SRD_1554_A3XX, PERF_SRD_1584_A3XX),

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    If the flight phase is neither descent nor approach, the descent path reference shall be set to indicate Nopath.
    PERF_SDD_07500_INT

    If the current itinerary is one of the following:
    - Active Primary Flight Plan Predictions;
    - Temporary Primary Flight Plan Predictions;
    -Current mode predictions(Normal or High priority);
    - Optimum altitude predictions;
    then the descent path shall be retrieved from the descent path object
    manager via a call to Perf_Ext_Despath.Pgvdespath.
    PERF_SDD_3888_INT

    When flight phase is beyond cruise with manual speed mode, then the speed validity shall be set as follows.
        If CAS is selected on FCU then Valid flag for MACH speed is set to False.
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
    CAS is selected in this test case.
    PERF_SDD_07545_INT


INPUT                                                                                                             VALUE
----------------------------------------------------------------------------------------------------   ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1263  1272 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
           »    False
1264  1273 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
           »    False
1265  1274 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
           »    False
1266  1275 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
           »    False
1267  1276 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
           »     True
1268  1277 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »     True
1269  1278 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
1270  1279 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
1271  1280 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
1272  1281 Perf_Dpkg.Min_Gwt
           »    100.0
1273  1282 Perf_Dpkg.Max_Gwt
           »    400.0
1274  1283 Perf_Background_Dpkg.Flight_Plan_Type                                                                                               I
           » s_Active
1275  1284 Perf_Background_Dpkg.Psignorehm
           »     True
1276  1285 Perf_Background_Dpkg.Pcfltphase
           » Goaround
1277  1286 Perf_Background_Dpkg.Ats_Enable
           »     True
1278  1287 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           » Goaround
1279  1288 Perf_Background_Dpkg.Psacalt
           »  10000.0
1280  1289 Perf_Database_Dpkg.Psmmo
           »     0.45
1281  1290 Perf_Background_Dpkg.Pszfw
           »    300.0
1282  1291 Perf_Background_Dpkg.Psblockfuel
           »     50.0
1283  1292 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
1284  1293 Perf_Background_Dpkg.Psairborne
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1285  1294 Perf_Background_Dpkg.Psautolat
           »    False
1286  1295 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
1287  1296 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
1288  1297 Perf_Background_Dpkg.Psengout
           »    False
1289  1298 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
1290  1299 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
1291  1300 Perf_Dpkg.Repredict_Hm_Decel
           »     True
1292  1301 Perf_Background_DPkg.Pshmdecel
           »     True
1293  1302 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
1294  1303 Perf_Ads_Dpkg.Fi_Enabled
           »    False
1295  1304 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
1296  1305 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
1297  1306 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
1298  1307 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
1299  1308 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
1300  1309 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
1301  1310 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
1302  1311 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
1303  1312 Perf_Background_Dpkg.Psappspdlat
           »     True
1304  1313 Perf_Dpkg.Pcengoutprds
           »   Altpln
1305  1314 Perf_Background_Dpkg.Pcpathref
           »   Onpath
1306  1315 Guid_Ext_Dpkg.Va3Vertmde                                                                                   Perf_Ext_Tp
           » kg.Vmspd
```

```
 1307   1316 Perf_Background_DPkg.Pscurcas
             »      5.0
 1308   1317 Perf_Background_DPkg.Pscurmach
             »      5.0
 1309   1318 Perf_Background_DPkg.Pscurtas
             »      5.0
 1310   1319 Perf_Background_Dpkg.Pcitin.Itinerary                                                                          Fuel_Plan_Fp
             » ln_Preds
 1311   1320 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 1312   1321 Perf_Background_Dpkg.Pstogwtval
             »    False
 1313   1322 Perf_Background_Dpkg.Pstogwt
             »     50.0
 1314   1323 Perf_Background_Dpkg.Pcgwind
             »  Invalid
 1315   1324 Perf_Background_Dpkg.Psgw
             »      0.0
 1316   1325 Perf_Dpkg.Gross_Weight.Status
             »    Valid
 1317   1326 Perf_Dpkg.Gross_Weight.Data
             »    150.0
 1318   1327 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 1319   1328 Perf_Background_Dpkg.Pcacconfig
             »        5
 1320   1329 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »    False
 1321   1330 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
 1322   1331 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    200.0
 1323   1332 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »    False
 1324   1333 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 1325   1334 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 1326   1335 Perf_Background_Dpkg.Psstpclbact
             »     True
 1327   1336 Perf_Background_Dpkg.Psstpdesact
             »     True
 1328   1337 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 1329   1338 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »      0.0
 1330   1339 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
             »     0.65
 1331   1340 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
 1332   1341 Perf_Background_Dpkg.Pccuraltcstr.Valid
             »     True
 1333   1342 Perf_Background_Dpkg.Pcprebcalt.Valid
             »     True
 1334   1343 Perf_Background_Dpkg.Pcgmttime.Hour
             »        1
 1335   1344 Perf_Background_Dpkg.Pcgmttime.Minute
             »        1
 1336   1345 Perf_Background_Dpkg.Pcgmttime.Second
             »        1
 1337   1346 Perf_Background_Dpkg.Psinertvs
             »      5.0
 1338   1347 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
             »        0
 1339   1348 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
             »        2
 1340   1349 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
             »        0
 1341   1350 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
             »        2
 1342   1351 Perf_Ads_Dpkg.Pr_Enabled
             »    False
 1343   1352 ATC_DISCRETES_PKG:body.Adson_Flag
             »    False
 1344   1353 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
             »     true
 1345   1354 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
             »     true
 1346   1355 ^Noise_End_Alt_Status                                                                                 Takeoff_Alt_Type
             » s.Active
 1347   1356 ^Noise_Speed_Val
             »     True
 1348   1357 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
             »     true
 1349   1358 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active
             »    false
 1350   1359 Perf_Background_Dpkg.Altholdmode
             »     true
```

```
Perf_Dpkg.takeoff_gwt.valid
»     True
Perf_Dpkg.takeoff_gwt.data
»    400.0


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcpathref                                               Nopath          (N/A)
»   NOPATH  P


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcspeedmode                                                                           Perf_Ext_Tp
» kg.Vmspd
Machmode
»    False
Perf_Background_Dpkg.Pcmanspd.Machvalid
»     True


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec                               False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Noise_Data.Speed.Valid                                   False          (N/A)
»    FALSE  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec                               True          (N/A)
»     TRUE  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec                               True          (N/A)
»     TRUE  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec                               True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Pstogwtval                                                True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Pstogwt                                                  325.0          0.001                 3.2
```

```
            » 5000E+02  P
 1377  1386 Perf_Background_Dpkg.Pcgwind                                              Valid          (N/A)
            »    VALID  P
 1378  1387 Perf_Background_Dpkg.Psgw                                                 325.0          0.001                3.2
            » 5000E+02  P
 1379  1388 Perf_Dpkg.Pcengoutprds                                                  NOPREDS          (N/A)
            »  NOPREDS  P
 1380  1389 Perf_Despath_Dpkg.Pcdespath.Vgavalid                                      False          (N/A)
            »    FALSE  P
 1381  1390 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                             False          (N/A)
            »    FALSE  P
 1382  1391 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                   True          (N/A)
            »     TRUE  P
 1383  1392 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                     True          (N/A)
            »     TRUE  P
 1384  1393 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                    True          (N/A)
            »     TRUE  P
 1385  1394 Perf_Background_Dpkg.Pcmanspd.Machvalid                                   False          (N/A)
            »    FALSE  P
 1386  1395 Perf_Background_Dpkg.Altholdmode                                          False          (N/A)
            »    FALSE  P
 1387  1396 
 1388  1397 
 1389  1398 ====> All 19 Comparisons Passed <====
 1390  1399 
 1391  1400 
 1392  1401 TESTID: 4
 1393  1402 
 1394  1403     Verify that if an engine-out condition exists and current flightphase is Preflight then the engine-out predictions
            »  flag
 1395  1404     is set to NOPREDS.  Verify that when pcitin is Secondary that descent path is invalidated.
 1396  1405     PERF_SDD_0417_INT, PERF_SDD_0418_INT, PERF_SDD_3105 (PERF_SRD_1919),
 1397  1406     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
 1398  1407                PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
 1399  1408                PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
 1400  1409     PERF_SDD_0410(PERF_SRD_1554_A3XX, PERF_SRD_1584_A3XX),
 1401  1410 
 1402  1411     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
 1403  1412     working flight plan.
 1404  1413     PERF_SDD_4328 (PERF_SRD_10166_INT)
 1405  1414 
 1406  1415     And if the VG CAS is less than V2+10 and the flight phase is less than or equal to climb then VG CAS is set to V2+
            » 10 speed.
 1407  1416     If the previous non-envelope-limited target speed is not set to current VG MACH then previous non-envelope-limited
```

```
            »  target speed
1408  1417      shall be set to the current VG CAS target and the previous CAS/Mach speed indicator is set to indicate CAS speed t
            » ype.
1409  1418      Here set VG CAS is less than V2+10 and flight phase is Preflight, previous CAS/Mach speed indicator is CAS.
1410  1419      PERF_SDD_3053_INT
1411  1420
1412  1421
1413  1422  INPUT                                                                                                          VALUE
1414  1423  --------------------------------------------------------------------------------------------------  ------------------
            » --------
1415  1424  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
            »    False
1416  1425  CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
            »    False
1417  1426  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
            »    False
1418  1427  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
            »    False
1419  1428  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
            »    False
1420  1429  CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
            »     True
1421  1430  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
            »     True
1422  1431  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
            »     True
1423  1432  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
            »     True
1424  1433  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
            »     True
1425  1434  Perf_Dpkg.Min_Gwt
            »    100.0
1426  1435  Perf_Dpkg.Max_Gwt
            »    400.0
1427  1436  Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
            » s_Active
1428  1437  Perf_Background_Dpkg.Psignorehm
            »     True
1429  1438  Perf_Background_Dpkg.Pcfltphase                                                                                      P
            » reflight
1430  1439  Perf_Background_Dpkg.Ats_Enable
            »     True
1431  1440  CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase                                                                    P
            » reflight
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1432  1441 Perf_Background_Dpkg.Psacalt
           »  10000.0
1433  1442 Perf_Database_Dpkg.Psmmo
           »     0.45
1434  1443 Perf_Background_Dpkg.Pszfw
           »    300.0
1435  1444 Perf_Background_Dpkg.Psblockfuel
           »     50.0
1436  1445 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
1437  1446 Perf_Background_Dpkg.Psairborne
           »     True
1438  1447 Perf_Background_Dpkg.Psautolat
           »    False
1439  1448 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
1440  1449 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
1441  1450 Perf_Background_Dpkg.Psengout
           »    False
1442  1451 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
1443  1452 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
1444  1453 Perf_Dpkg.Repredict_Hm_Decel
           »     True
1445  1454 Perf_Background_DPkg.Pshmdecel
           »     True
1446  1455 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
1447  1456 Perf_Ads_Dpkg.Fi_Enabled
           »    False
1448  1457 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
1449  1458 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
1450  1459 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
1451  1460 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
1452  1461 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
1453  1462 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1454   1463 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
            »     True
1455   1464 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
            »     True
1456   1465 Perf_Background_Dpkg.Psappspdlat
            »     True
1457   1466 Perf_Dpkg.Pcengoutprds
            »   Altpln
1458   1467 Guid_Ext_Dpkg.Va3lcautoctl
            »     True
1459   1468 Perf_Background_Dpkg.Psvgonpath
            »    False
1460   1469 Perf_Background_Dpkg.Pcpathref
            »   Onpath
1461   1470 Guid_Ext_Dpkg.Va3Vertmde                                                                                       Perf_Ext_Tp
            » kg.Vmspd
1462   1471 Perf_Background_DPkg.Pscurcas
            »      5.0
1463   1472 Perf_Background_DPkg.Pscurmach
            »      5.0
1464   1473 Perf_Background_DPkg.Pscurtas
            »      5.0
1465   1474 Perf_Despath_Dpkg.Pcdespath.Vgavalid
            »     True
1466   1475 Perf_Background_Dpkg.Pstogwtval
            »    False
1467   1476 Perf_Background_Dpkg.Pstogwt
            »     50.0
1468   1477 Perf_Background_Dpkg.Pcgwind
            »  Invalid
1469   1478 Perf_Background_Dpkg.Psgw
            »      0.0
1470   1479 Perf_Dpkg.Gross_Weight.Status
            »    Valid
1471   1480 Perf_Dpkg.Gross_Weight.Data
            »    150.0
1472   1481 Perf_Integration_DPkg.Pcairbrakes
            »   Fullab
1473   1482 Perf_Background_Dpkg.Pcacconfig
            »        5
1474   1483 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
            »    False
1475   1484 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
            »   9000.0
```

```
1476  1485 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    200.0
1477  1486 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
1478  1487 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
1479  1488 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
1480  1489 Perf_Background_Dpkg.Psstpclbact
           »     True
1481  1490 Perf_Background_Dpkg.Psstpdesact
           »     True
1482  1491 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
1483  1492 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
1484  1493 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
1485  1494 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
1486  1495 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
1487  1496 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
1488  1497 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
1489  1498 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
1490  1499 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
1491  1500 Perf_Background_Dpkg.Psinertvs
           »      5.0
1492  1501 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
           »        0
1493  1502 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
           »        2
1494  1503 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
1495  1504 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
1496  1505 Perf_Ads_Dpkg.Pr_Enabled
           »    False
1497  1506 ATC_DISCRETES_PKG:body.Adson_Flag
           »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
Perf_Integration_Dpkg.Psoldnoentgt
»      1.0
Perf_Background_Dpkg.Pcoldcasmchi                                                                       Fmcs_Base_Ty
» pes.Mach
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
»     true
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
»     true
^Noise_End_Alt_Status                                                                               Takeoff_Alt_Type
» s.Active
^Noise_Speed_Val
»     True
Perf_Background_Dpkg.Pcitin.Itinerary                                                                   Fuel_Plan_Fp
» ln_Preds
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
»    False
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
»    False
Perf_Background_Dpkg.Psv2plus10
»      1.0
Perf_Dpkg.takeoff_gwt.valid
»     True
Perf_Dpkg.takeoff_gwt.data
»    400.0


OUTPUT                                                          EXPECTED                TOLERANCE               ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                 False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Noise_Data.Speed.Valid                                    False          (N/A)
»    FALSE  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec                                True          (N/A)
»     TRUE  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec                                True          (N/A)
»     TRUE  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec                                True          (N/A)
»     TRUE  P
Perf_Integration_Dpkg.Psoldnoentgt                                               1.0          0.001                 1.0
» 0000E+00  P
Perf_Background_Dpkg.Pcoldcasmchi                                                Cas          (N/A)
»      CAS  P
```

```
Perf_Background_Dpkg.Pstogwtval                                                True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Pstogwt                                                  325.0          0.001                3.2
» 5000E+02  P
Perf_Background_Dpkg.Pcgwind                                                  Valid          (N/A)
»    VALID  P
Perf_Background_Dpkg.Psgw                                                     325.0          0.001                3.2
» 5000E+02  P
Perf_Dpkg.Pcengoutprds                                                      NOPREDS          (N/A)
»  NOPREDS  P
Perf_Despath_Dpkg.Pcdespath.Vgavalid                                          False          (N/A)
»    FALSE  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                 False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                       True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                         True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                        True          (N/A)
»     TRUE  P


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Psvgonpath
»     True


====> All 17 Comparisons Passed <====


TESTID: 5

    Verify that if an engine-out condition exists and current flightphase is cruise then the engine-out predictions fl
» ag
    is set to PRDSTODEST.  Verify that when pcitin is Fuel_Plan_Stage1 that descent path is invalidated.
    The Current Itinary is not secondary and so descent path is not retrieved from descent path object manager.(PERF_S
» DD_3682_INT).
    PERF_SDD_0412_INT, PERF_SDD_0417_INT,  PERF_SDD_3682_INT
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
               PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
               PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    Cdk_Vert_Dpkg.Engine_Out indicates that there is an Engine Out.

    If not ( Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is curren
» tly in Noise
    Ramp segment and no engine out condition exist) then, the validity of Perf_Background_Dpkg.Noise_Data.Altitude &
    Perf_Background_Dpkg.Noise_Data.Tspd shall be set to invalid and Perf_Background_Dpkg.Noise_Data.Thrust is set to
» no derate
    (Cdk_Entry_Tpkg.Drtnone).
    PERF_SDD_4339 (PERF_SRD_12371_INT)

    The anti ice data shall be copied from the IO_Engine_Data_Dpkg for the working flight plan when it valid.
    PERF_SDD_07169_INT

    A/C is in Cruise and current itin is Fuel_Plan_Stage1 so target speed is not
    limited by calling the speed envelope module.
    PERF_SDD_3055_INT

    And if the VG CAS is less than V2+10 and the flight phase is less than or equal to climb then VG CAS is set to V2+
» 10 speed.
    If the previous non-envelope-limited target speed is not set to current VG MACH then previous non-envelope-limited
»  target speed
    shall be set to the current VG CAS target and the previous CAS/Mach speed indicator is set to indicate CAS speed t
» ype.
    Here set VG CAS is less than V2+10 and flight phase is Cruise, previous CAS/Mach speed indicator is CAS.
    PERF_SDD_3053_INT


INPUT                                                                                                         VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
»    False
```

```
1584  1593 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
           »     True
1585  1594 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »     True
1586  1595 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
1587  1596 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
1588  1597 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
1589  1598 Perf_Dpkg.Min_Gwt
           »    100.0
1590  1599 Perf_Dpkg.Max_Gwt
           »    400.0
1591  1600 Perf_Background_Dpkg.Flight_Plan_Type                                                                                       I
           » s_Active
1592  1601 Perf_Background_Dpkg.Psignorehm
           »     True
1593  1602 Perf_Background_Dpkg.Pcfltphase
           »   Cruise
1594  1603 Perf_Background_Dpkg.Ats_Enable
           »     True
1595  1604 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »   Cruise
1596  1605 Perf_Background_Dpkg.Psacalt
           »  10000.0
1597  1606 Perf_Database_Dpkg.Psmmo
           »     0.45
1598  1607 Perf_Background_Dpkg.Pszfw
           »    300.0
1599  1608 Perf_Background_Dpkg.Psblockfuel
           »     50.0
1600  1609 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
1601  1610 Perf_Background_Dpkg.Psairborne
           »     True
1602  1611 Perf_Background_Dpkg.Psautolat
           »    False
1603  1612 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
1604  1613 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
1605  1614 Perf_Background_Dpkg.Psengout
           »    False
```

```
1606  1615 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
1607  1616 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
1608  1617 Perf_Dpkg.Repredict_Hm_Decel
           »     True
1609  1618 Perf_Background_DPkg.Pshmdecel
           »     True
1610  1619 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
1611  1620 Perf_Ads_Dpkg.Fi_Enabled
           »    False
1612  1621 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
1613  1622 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
1614  1623 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
1615  1624 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
1616  1625 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
1617  1626 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
1618  1627 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
1619  1628 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
1620  1629 Perf_Background_Dpkg.Psappspdlat
           »     True
1621  1630 Perf_Dpkg.Pcengoutprds
           »   Altpln
1622  1631 Perf_Background_Dpkg.Pcpathref
           »   Onpath
1623  1632 Guid_Ext_Dpkg.Va3Vertmde                                                                                   Perf_Ext_Tp
           » kg.Vmspd
1624  1633 Perf_Background_DPkg.Pscurcas
           »      5.0
1625  1634 Perf_Background_DPkg.Pscurmach
           »      5.0
1626  1635 Perf_Background_DPkg.Pscurtas
           »      5.0
1627  1636 Perf_Background_Dpkg.Pcitin.Itinerary                                                                          Fuel_Pla
           » n_Stage1
```

```
1628  1637 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »    False
1629  1638 Perf_Background_Dpkg.Pstogwtval
           »    False
1630  1639 Perf_Background_Dpkg.Pstogwt
           »     50.0
1631  1640 Perf_Background_Dpkg.Pcgwind
           »  Invalid
1632  1641 Perf_Background_Dpkg.Psgw
           »      0.0
1633  1642 Perf_Dpkg.Gross_Weight.Status
           »    Valid
1634  1643 Perf_Dpkg.Gross_Weight.Data
           »    150.0
1635  1644 Perf_Integration_DPkg.Pcairbrakes
           »   Fullab
1636  1645 Perf_Background_Dpkg.Pcacconfig
           »        5
1637  1646 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
           »    False
1638  1647 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
1639  1648 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    200.0
1640  1649 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    400.0
1641  1650 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
1642  1651 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
1643  1652 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
1644  1653 Perf_Background_Dpkg.Psstpclbact
           »     True
1645  1654 Perf_Background_Dpkg.Psstpdesact
           »     True
1646  1655 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
1647  1656 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
1648  1657 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
1649  1658 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1650  1659 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
1651  1660 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
1652  1661 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
1653  1662 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
1654  1663 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
1655  1664 Perf_Background_Dpkg.Psinertvs
           »      5.0
1656  1665 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
           »        0
1657  1666 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
           »        2
1658  1667 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
1659  1668 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
1660  1669 Perf_Ads_Dpkg.Pr_Enabled
           »    False
1661  1670 ATC_DISCRETES_PKG:body.Adson_Flag
           »    False
1662  1671 Perf_Integration_Dpkg.Psoldnoentgt
           »      1.0
1663  1672 Perf_Background_Dpkg.Pcoldcasmchi                                                                         Fmcs_Base_Ty
           » pes.Mach
1664  1673 Perf_Background_Dpkg.Pcspeedmode                                                                          Perf_Ext_Tpk
           » g.Vmecon
1665  1674 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »     true
1666  1675 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »     true
1667  1676 ^Noise_End_Alt_Status                                                                                 Takeoff_Alt_Type
           » s.Active
1668  1677 ^Noise_Speed_Val
           »    False
1669  1678 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
           »     True
1670  1679 Perf_Background_Dpkg.Noise_Data.Speed.Valid
           »     True
1671  1680 Perf_Background_Dpkg.Noise_Data.Thrust                                                                     Cdk_Entry_T
           » pkg.Drt1
```

```
1672  1681 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
           »     True
1673  1682 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
           »    False
1674  1683 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
           »    False
1675  1684 Perf_Background_Dpkg.Ac_Anti_Ice
           »    False
1676  1685 Perf_Integration_Dpkg.Psoldnoentgt
           »      1.0
1677  1686 Perf_Dpkg.takeoff_gwt.valid
           »     True
1678  1687 Perf_Dpkg.takeoff_gwt.data
           »    400.0
1679  1688 Perf_Background_Dpkg.Psgetout
           »     True
1680  1689 Perf_Background_Dpkg.Ref_Flight_Plan
           »        1
1681  1690 Perf_Ext_Despath:Body.data_storage(Active).Pgvdespath.Vgavalid
           »     True
1682  1691
1683  1692
1684  1693 OUTPUT                                                         EXPECTED              TOLERANCE              ACTUAL
           »           P/F
1685  1694 ----------------------------------------------------  ----------------------------  -------------  ------------------
           » --------  ----
1686  1695 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                False          (N/A)
           »    FALSE  P
1687  1696 Perf_Background_Dpkg.Noise_Data.Speed.Valid                                   False          (N/A)
           »    FALSE  P
1688  1697 Perf_Background_Dpkg.Noise_Data.Thrust                                      Drtnone          (N/A)
           »  DRTNONE  P
1689  1698 Perf_Background_Dpkg.Noise_Data.Tspd.Valid                                    False          (N/A)
           »    FALSE  P
1690  1699 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec                               True          (N/A)
           »     TRUE  P
1691  1700 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec                               True          (N/A)
           »     TRUE  P
1692  1701 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec                               True          (N/A)
           »     TRUE  P
1693  1702 Perf_Integration_Dpkg.Psoldnoentgt                                              0.0          0.001                 0.0
           » 0000E+00  P
1694  1703 Perf_Background_Dpkg.Pcoldcasmchi                                               Cas          (N/A)
           »      CAS  P
```

```
1695   1704 Perf_Dpkg.Pcengoutprds                                                   PRDSTODEST          (N/A)                  PR
            » DSTODEST  P
1696   1705 Perf_Despath_Dpkg.Pcdespath.Vgavalid                                          False          (N/A)
            »    FALSE  P
1697   1706 Perf_Background_Dpkg.Psautolat                                                False          (N/A)
            »    FALSE  P
1698   1707 Perf_Background_Dpkg.Psengout                                                  True          (N/A)
            »     TRUE  P
1699   1708 Perf_Background_Dpkg.Pcfltphase                                              Cruise          (N/A)
            »   CRUISE  P
1700   1709 Perf_Background_Dpkg.Pcspeedmode                                Perf_Ext_Tpkg.Vmspd          (N/A)
            »    VMSPD  P
1701   1710 Perf_Background_DPkg.Pscurcas                                                   5.0          0.001                 5.0
            » 0000E+00  P
1702   1711 Perf_Background_DPkg.Pscurmach                                                  5.0          0.001                 5.0
            » 0000E+00  P
1703   1712 Perf_Background_DPkg.Pscurtas                                                   5.0          0.001                 5.0
            » 0000E+00  P
1704   1713 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                 False          (N/A)
            »    FALSE  P
1705   1714 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                       True          (N/A)
            »     TRUE  P
1706   1715 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                         True          (N/A)
            »     TRUE  P
1707   1716 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                        True          (N/A)
            »     TRUE  P
1708   1717 Perf_Background_Dpkg.Ac_Anti_Ice                                               True          (N/A)
            »     TRUE  P
1709   1718
1710   1719
1711   1720 ====> All 23 Comparisons Passed <====
1712   1721
1713   1722
1714   1723 TESTID: 6
1715   1724
1716   1725     Verify that when current itinerary is Fuel_Plan_Stage1 and Psgetout set to False,then
1717   1726     Invalidate the descent path to ensure that it is rebuilt. (PERF_SDD_3681_INT).
1718   1727     PERF_SDD_3053_INT, PERF_SDD_3681_INT
1719   1728     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
1720   1729                PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
1721   1730                PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
1722   1731
1723   1732     Cdk_Vert_Dpkg.Engine_Out indicates that there is an Engine Out.
1724   1733
```

```
1725  1734     If not ( Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is curren
           » tly in Noise
1726  1735     Ramp segment and no engine out condition exist) then, the validity of Perf_Background_Dpkg.Noise_Data.Altitude &
1727  1736     Perf_Background_Dpkg.Noise_Data.Tspd shall be set to invalid and Perf_Background_Dpkg.Noise_Data.Thrust is set to
           » no derate
1728  1737     (Cdk_Entry_Tpkg.Drtnone).
1729  1738     PERF_SDD_4339 (PERF_SRD_12371_INT)
1730  1739
1731  1740     The anti ice validity flag is set to false when it invalid.
1732  1741     PERF_SDD_07169_INT
1733  1742
1734  1743     The Current Itinary is FUEL PLANNING STAGE 1 and descent path is retrieved from descent path object manager.
1735  1744     PERF_SDD_3682_INT
1736  1745
1737  1746     The bleeds data: the engine cowl, wing and air conditioning bleeds validity flags are set to false when it invalid
1738  1747     PERF_SDD_4328 (PERF_SRD_10166_INT)
1739  1748
1740  1749
1741  1750 INPUT                                                                                                  VALUE
1742  1751 ---------------------------------------------------------------------------------------------------  ------------------
           » --------
1743  1752 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
           »    False
1744  1753 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
           »    False
1745  1754 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
           »    False
1746  1755 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
           »    False
1747  1756 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
           »    False
1748  1757 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
           »    false
1749  1758 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »    false
1750  1759 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »    false
1751  1760 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »    false
1752  1761 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »    false
1753  1762 Perf_Dpkg.Min_Gwt
           »    100.0
1754  1763 Perf_Dpkg.Max_Gwt
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
           »    400.0
1755  1764 Perf_Background_Dpkg.Flight_Plan_Type                                                                              I
           » s_Active
1756  1765 Perf_Background_Dpkg.Psignorehm
           »     True
1757  1766 Perf_Background_Dpkg.Pcfltphase
           »   Cruise
1758  1767 Perf_Background_Dpkg.Ats_Enable
           »     True
1759  1768 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »   Cruise
1760  1769 Perf_Background_Dpkg.Psacalt
           »  10000.0
1761  1770 Perf_Database_Dpkg.Psmmo
           »     0.45
1762  1771 Perf_Background_Dpkg.Pszfw
           »    300.0
1763  1772 Perf_Background_Dpkg.Psblockfuel
           »     50.0
1764  1773 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
1765  1774 Perf_Background_Dpkg.Psairborne
           »     True
1766  1775 Perf_Background_Dpkg.Psautolat
           »    False
1767  1776 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
1768  1777 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »     True
1769  1778 Perf_Background_Dpkg.Psengout
           »    False
1770  1779 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
1771  1780 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
1772  1781 Perf_Dpkg.Repredict_Hm_Decel
           »     True
1773  1782 Perf_Background_DPkg.Pshmdecel
           »     True
1774  1783 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
1775  1784 Perf_Ads_Dpkg.Fi_Enabled
           »    False
1776  1785 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
                 »    False
  1777   1786   Perf_Background_Dpkg.Pcholdflags.Manhmwarn
                 »     True
  1778   1787   Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
                 »     True
  1779   1788   Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
                 »     True
  1780   1789   Perf_Background_Dpkg.Pcholdflags.Hmdistval
                 »     True
  1781   1790   Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
                 »     True
  1782   1791   Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
                 »     True
  1783   1792   Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
                 »     True
  1784   1793   Perf_Background_Dpkg.Psappspdlat
                 »     True
  1785   1794   Perf_Dpkg.Pcengoutprds
                 »   Altpln
  1786   1795   Perf_Background_Dpkg.Pcpathref
                 »   Onpath
  1787   1796   Guid_Ext_Dpkg.Va3Vertmde                                                                                              Perf_Ext_Tp
                 » kg.Vmspd
  1788   1797   Perf_Background_DPkg.Pscurcas
                 »      5.0
  1789   1798   Perf_Background_DPkg.Pscurmach
                 »      5.0
  1790   1799   Perf_Background_DPkg.Pscurtas
                 »      5.0
  1791   1800   Perf_Despath_Dpkg.Pcdespath.Vgavalid
                 »     True
  1792   1801   Perf_Background_Dpkg.Pstogwtval
                 »    False
  1793   1802   Perf_Background_Dpkg.Pstogwt
                 »     50.0
  1794   1803   Perf_Background_Dpkg.Pcgwind
                 »  Invalid
  1795   1804   Perf_Background_Dpkg.Psgw
                 »      0.0
  1796   1805   Perf_Dpkg.Gross_Weight.Status
                 »    Valid
  1797   1806   Perf_Dpkg.Gross_Weight.Data
                 »    150.0
  1798   1807   Perf_Integration_DPkg.Pcairbrakes
```

```
             »   Fullab
 1799   1808 Perf_Background_Dpkg.Pcacconfig
             »        5
 1800   1809 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »    False
 1801   1810 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
 1802   1811 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    200.0
 1803   1812 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    400.0
 1804   1813 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »    False
 1805   1814 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 1806   1815 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 1807   1816 Perf_Background_Dpkg.Psstpclbact
             »     True
 1808   1817 Perf_Background_Dpkg.Psstpdesact
             »     True
 1809   1818 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
 1810   1819 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »      0.0
 1811   1820 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
             »     0.65
 1812   1821 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
 1813   1822 Perf_Background_Dpkg.Pccuraltcstr.Valid
             »     True
 1814   1823 Perf_Background_Dpkg.Pcprebcalt.Valid
             »     True
 1815   1824 Perf_Background_Dpkg.Pcgmttime.Hour
             »        1
 1816   1825 Perf_Background_Dpkg.Pcgmttime.Minute
             »        1
 1817   1826 Perf_Background_Dpkg.Pcgmttime.Second
             »        1
 1818   1827 Perf_Background_Dpkg.Psinertvs
             »      5.0
 1819   1828 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
             »        0
 1820   1829 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
```

```
           »        2
1821  1830 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
1822  1831 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
1823  1832 Perf_Ads_Dpkg.Pr_Enabled
           »    False
1824  1833 ATC_DISCRETES_PKG:body.Adson_Flag
           »    False
1825  1834 Perf_Integration_Dpkg.Psoldnoentgt
           »      1.0
1826  1835 Perf_Background_Dpkg.Pcoldcasmchi
           »      Cas
1827  1836 Perf_Background_Dpkg.Pcspeedmode                                                                                 Perf_Ext_Tpk
           » g.Vmecon
1828  1837 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »    False
1829  1838 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »    False
1830  1839 ^Noise_End_Alt_Status                                                                                        Takeoff_Alt_Type
           » s.Active
1831  1840 ^Noise_Speed_Val
           »    False
1832  1841 Perf_Background_Dpkg.Pcitin.Itinerary                                                                                Fuel_Pla
           » n_Stage1
1833  1842 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
           »    False
1834  1843 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
           »    False
1835  1844 Perf_Background_Dpkg.Ac_Anti_Ice
           »     True
1836  1845 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai
           »     True
1837  1846 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai
           »     True
1838  1847 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond
           »     True
1839  1848 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
           »     True
1840  1849 Perf_Background_Dpkg.Noise_Data.Speed.Valid
           »     True
1841  1850 Perf_Background_Dpkg.Noise_Data.Thrust                                                                        Cdk_Entry_T
           » pkg.Drt1
1842  1851 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
                 »     True
 1843   1852 Perf_Dpkg.takeoff_gwt.valid
             »     True
 1844   1853 Perf_Dpkg.takeoff_gwt.data
             »    400.0
 1845   1854 Perf_Background_Dpkg.Psgetout
             »    False
 1846   1855
 1847   1856
 1848   1857 OUTPUT                                                       EXPECTED                TOLERANCE                ACTUAL
             »           P/F
 1849   1858 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 1850   1859 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                   False          (N/A)
             »    FALSE  P
 1851   1860 Perf_Background_Dpkg.Noise_Data.Speed.Valid                                      False          (N/A)
             »    FALSE  P
 1852   1861 Perf_Background_Dpkg.Noise_Data.Thrust                                         Drtnone          (N/A)
             »  DRTNONE  P
 1853   1862 Perf_Background_Dpkg.Noise_Data.Tspd.Valid                                       False          (N/A)
             »    FALSE  P
 1854   1863 Perf_Integration_Dpkg.Psoldnoentgt                                                 0.0          0.001                   0.0
             » 0000E+00  P
 1855   1864 Perf_Background_Dpkg.Pcoldcasmchi                                  Fmcs_Base_Types.Mach          (N/A)
             »     MACH  P
 1856   1865 Perf_Despath_Dpkg.Pcdespath.Vgavalid                                             False          (N/A)
             »    FALSE  P
 1857   1866 Perf_Background_Dpkg.Psautolat                                                   False          (N/A)
             »    FALSE  P
 1858   1867 Perf_Background_Dpkg.Psengout                                                     True          (N/A)
             »     TRUE  P
 1859   1868 Perf_Background_Dpkg.Pcfltphase                                                 Cruise          (N/A)
             »   CRUISE  P
 1860   1869 Perf_Background_Dpkg.Pcspeedmode                                    Perf_Ext_Tpkg.Vmspd          (N/A)
             »    VMSPD  P
 1861   1870 Perf_Background_DPkg.Pscurcas                                                      5.0          0.001                   5.0
             » 0000E+00  P
 1862   1871 Perf_Background_DPkg.Pscurmach                                                     5.0          0.001                   5.0
             » 0000E+00  P
 1863   1872 Perf_Background_DPkg.Pscurtas                                                      5.0          0.001                   5.0
             » 0000E+00  P
 1864   1873 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                    False          (N/A)
             »    FALSE  P
 1865   1874 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                         False          (N/A)
```

```
            »    FALSE  P
 1866  1875 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                              False          (N/A)
            »    FALSE  P
 1867  1876 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                             False          (N/A)
            »    FALSE  P
 1868  1877 Perf_Background_Dpkg.Ac_Anti_Ice                                                    False          (N/A)
            »    FALSE  P
 1869  1878
 1870  1879
 1871  1880 ====> All 19 Comparisons Passed <====
 1872  1881
 1873  1882
 1874  1883 TESTID: 7
 1875  1884
 1876  1885     Verify that when itin is Secprim that descent path is not invalidated.
 1877  1886     The Current Itinary is secondary and descent path is retrieved from descent path object manager.(PERF_SDD_3682_INT
            » ).
 1878  1887
 1879  1888     For an independent from-to pair Secondaryn flight plan, the starting predictions data shall be set up
 1880  1889     as if the aircraft were sitting on the ground in pre-flight at the origin airport of the Secondaryn flight plan,
 1881  1890     rather than from the current aircraft state.  Thus, following data are set:
 1882  1891     - The airborne flag (Psairborne) is set false.
 1883  1892     - Auto lateral mode (Psautolat) is set to true.
 1884  1893     - Engine out flag (Psengout) is set to false.
 1885  1894     - The current flightphase (Pcfltphase) is set to pre-flight.
 1886  1895     - Speed mode (Pcspeedmode) is set to Vmecon.
 1887  1896     - Despath reference (Pcpathref) is set to Nopath.
 1888  1897     - Current GMT time (Pcgmttime) (Hours, Minutes & Seconds) is set to zero.
 1889  1898     - Inertial vertical speed (Psinertvs) is set to zero.
 1890  1899     - Current aircraft speeds (Pscurtas, Pscurmach & Pscurcas) are set to zero.
 1891  1900     - Validity of Aircraft True air speed (Pscurtasvalid) set to False
 1892  1901     - Aircraft configuration (Pcacconfig) is set to clean.
 1893  1902     - Airbrakes (Pcairbrakes) are set to zero airbrakes.
 1894  1903     - Constraint management (Pccuraltcstr) validity is set to false.
 1895  1904     - Previous captured barometric altitude (Pcprebcalt) validity is set to false.
 1896  1905     - All the flags in the perf hold flag record (Pcholdflags) are set to false.
 1897  1906     - All the flags in the descent limit latch record (Pcdeslimlat) are set to false.
 1898  1907     - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false.
 1899  1908     - Flag indicating aircraft is within 3 NM prior to the entry of the HM(Psconsider_Hm) is      set to false.
 1900  1909     - Flag indicating aircraft is in HA/HF decel zone (Pshxpxdecel) is set to false.
 1901  1910     - Flag indicating aircraft is in HM decel zone (Pshmdecel) is set to false.
 1902  1911     - Flag indicating to Ignore HM (Psignorehm) is set to true.
 1903  1912     - Background step climb & step descent active flags (Psstpclbact & Psstpdesact) are set     to false.
 1904  1913     - Engines off status (Psenginesoff) is set to true (off).
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
1905  1914     - Aircraft engine or wing anti ice (Ac_Anti_Ice) is set to false (Off).
1906  1915     - Aircraft bleeds status (Ac_Bleeds); Engine Cowl Anti-Ice bleed, Wing Anti-Ice Bleed and
1907  1916       Air Conditioning Bleed are set to false (off).
1908  1917     - Cruise altitude (Pscrzalt) data is set by calling procedure
1909  1918       Fpln_Ext_Dpkg.Get_Cruise_Alt.
1910  1919     - Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
1911  1920       Data and Valid values respectively.
1912  1921     - Valid cruise altitude flag (Valcrzalt) is set from the retrieved cruise altitude data.
1913  1922     - ADC/FG input data (Adc_Fg_Valid) validity is set to true.
1914  1923     - Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to true.
1915  1924     - The Secondary flight plan predictions flag is set to True, if the current itinerary is primary flight plan predi
             » ctions.
1916  1925     - The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Ma
             » ximum_Alt.
1917  1926     - The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_
             » Maximum_Alt.
1918  1927
1919  1928     These initializations make predictions independent of the Active Primary flightplan and current aircraft character
             » istics
1920  1929
1921  1930     in this case,
1922  1931     flight plan is Secondary
1923  1932     the current itinerary is  primary flight plan predictions
1924  1933     PERF_SDD_4796(PERF_SRD_1592, PERF_SRD_23775, PERF_SRD_6005_INT)
1925  1934
1926  1935     If Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is currently in
             »  Noise Ramp
1927  1936     segment and no engine out condition exist then the following noise data shall be set up for background's usage:
1928  1937     PERF_SDD_5607_INT
1929  1938
1930  1939     The validity of Perf_Background_Dpkg.Noise_Data.Altitude shall be set to valid and its value is set to Noise_End_A
             » lt obtained
1931  1940     from FPLN.
1932  1941     PERF_SDD_5608_INT
1933  1942
1934  1943     Here, Cdk_Vert_Dpkg.Engine_Out indicates that there is no Engine Out.
1935  1944
1936  1945     If Noise Speed (Noise_Speed_Val) from FPLN is valid then the validity of Perf_Background_Dpkg.Noise_Data.Speed sha
             » ll be set to
1937  1946     valid and its value is set to Noise_Speed obtained from FPLN, otherwise its validity is set to invalid.
1938  1947     As in this TC, Noise_Speed_Val is False, the validity of Perf_Background_Dpkg.Noise_Data.Speed is set to False.
1939  1948     PERF_SDD_5610_INT
1940  1949
1941  1950
```

```
1942  1951 INPUT                                                                                             VALUE
1943  1952 ---------------------------------------------------------------------------------------------------  ------------------
           » --------
1944  1953 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
           »    False
1945  1954 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
           »    False
1946  1955 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
           »    False
1947  1956 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
           »    False
1948  1957 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
           »    False
1949  1958 Perf_Dpkg.Min_Gwt
           »    100.0
1950  1959 Perf_Dpkg.Max_Gwt
           »    400.0
1951  1960 Prf_Bkgnd_Pkg:BODY.Valcrzalt
           »    False
1952  1961 Perf_Background_Dpkg.Pcactorsec                                                                         S
           » econdary
1953  1962 Perf_Background_Dpkg.Flight_Plan_Type
           » No_Preds
1954  1963 Perf_Background_Dpkg.Pcitin.Flight_Plan                                                                 S
           » econdary
1955  1964 Perf_Background_Dpkg.Psignorehm
           »    False
1956  1965 Perf_Background_Dpkg.Pcfltphase
           »   Cruise
1957  1966 Perf_Background_Dpkg.Ats_Enable
           »     True
1958  1967 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »   Cruise
1959  1968 Perf_Background_Dpkg.Psacalt
           »  10000.0
1960  1969 Perf_Database_Dpkg.Psmmo
           »     0.45
1961  1970 Perf_Background_Dpkg.Pszfw
           »    300.0
1962  1971 Perf_Background_Dpkg.Psblockfuel
           »     50.0
1963  1972 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
1964  1973 Perf_Background_Dpkg.Psairborne
```

```
            »     True
 1965  1974 Perf_Background_Dpkg.Psautolat
            »    False
 1966  1975 Guid_Ext_Dpkg.Gcxxlatautoc
            »    False
 1967  1976 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
            »    False
 1968  1977 Perf_Background_Dpkg.Psengout
            »     True
 1969  1978 Cdk_Vert_Dpkg:Body.Engine_Out_I
            »    False
 1970  1979 Perf_Background_Dpkg.Pcholdflags.Hmdecel
            »     True
 1971  1980 Perf_Dpkg.Repredict_Hm_Decel
            »     True
 1972  1981 Perf_Background_DPkg.Pshmdecel
            »     True
 1973  1982 Perf_Background_Dpkg.Pcholdflags.Hmactive
            »     True
 1974  1983 Perf_Ads_Dpkg.Fi_Enabled
            »    False
 1975  1984 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
            »    False
 1976  1985 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
            »     True
 1977  1986 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
            »     True
 1978  1987 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
            »     True
 1979  1988 Perf_Background_Dpkg.Pcholdflags.Hmdistval
            »     True
 1980  1989 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
            »     True
 1981  1990 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
            »     True
 1982  1991 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
            »     True
 1983  1992 Perf_Background_Dpkg.Psappspdlat
            »     True
 1984  1993 Perf_Dpkg.Pcengoutprds
            »   Altpln
 1985  1994 Perf_Background_Dpkg.Pcpathref
            »   Onpath
 1986  1995 Guid_Ext_Dpkg.Va3Vertmde                                                                  Perf_Ext_Tpk
```

```
              » g.Vmnone
 1987   1996 Perf_Background_DPkg.Pscurcas
             »      5.0
 1988   1997 Perf_Background_DPkg.Pscurmach
             »      5.0
 1989   1998 Perf_Background_DPkg.Pscurtas
             »      5.0
 1990   1999 Perf_Background_Dpkg.Psenginesoff
             »    False
 1991   2000 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »    False
 1992   2001 Perf_Background_Dpkg.Pstogwtval
             »    False
 1993   2002 Perf_Background_Dpkg.Pstogwt
             »     50.0
 1994   2003 Perf_Background_Dpkg.Pcgwind
             »  Invalid
 1995   2004 Perf_Background_Dpkg.Psgw
             »      0.0
 1996   2005 Perf_Dpkg.Gross_Weight.Status
             »    Valid
 1997   2006 Perf_Dpkg.Gross_Weight.Data
             »    150.0
 1998   2007 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 1999   2008 Perf_Background_Dpkg.Pcacconfig
             »        5
 2000   2009 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »     True
 2001   2010 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
 2002   2011 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    200.0
 2003   2012 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    400.0
 2004   2013 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »    False
 2005   2014 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 2006   2015 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 2007   2016 Perf_Background_Dpkg.Psstpclbact
             »     True
 2008   2017 Perf_Background_Dpkg.Psstpdesact
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
             »     True
 2009   2018 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
 2010   2019 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »      0.0
 2011   2020 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
             »     0.65
 2012   2021 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
 2013   2022 Perf_Background_Dpkg.Pccuraltcstr.Valid
             »     True
 2014   2023 Perf_Background_Dpkg.Pcprebcalt.Valid
             »     True
 2015   2024 Perf_Background_Dpkg.Pcgmttime.Hour
             »        1
 2016   2025 Perf_Background_Dpkg.Pcgmttime.Minute
             »        1
 2017   2026 Perf_Background_Dpkg.Pcgmttime.Second
             »        1
 2018   2027 Perf_Background_Dpkg.Psinertvs
             »      5.0
 2019   2028 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
             »        0
 2020   2029 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
             »        2
 2021   2030 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
             »        0
 2022   2031 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
             »        2
 2023   2032 Perf_Ads_Dpkg.Pr_Enabled
             »    False
 2024   2033 ATC_DISCRETES_PKG:body.Adson_Flag
             »    False
 2025   2034 Perf_Integration_Dpkg.Psoldnoentgt
             »      0.0
 2026   2035 Perf_Background_Dpkg.Pcoldcasmchi                                                                         Fmcs_Base_Ty
             » pes.Mach
 2027   2036 Perf_Background_Dpkg.Pcspeedmode                                                                            Perf_Ext_Tp
             » kg.Vmspd
 2028   2037 Perf_Background_Dpkg.Adc_Fg_Valid
             »    False
 2029   2038 Prf_Bkgnd_Pkg:body.Fgspdsvalid
             »    False
 2030   2039 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt_Status             Takeoff_Alt_Type
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
            » s.Active
 2031  2040 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_Speed_Val
            »    False
 2032  2041 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt
            »    300.0
 2033  2042 Perf_Background_Dpkg.Noise_Data.Altitude.Data
            »      0.0
 2034  2043 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
            »    False
 2035  2044 Perf_Background_Dpkg.Noise_Data.Speed.Valid
            »     True
 2036  2045 Perf_Background_Dpkg.Pcitin.Itinerary                                                          Prim_Fp
            » ln_Preds
 2037  2046 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
            »    False
 2038  2047 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
            »    False
 2039  2048 Perf_Background_Dpkg.Ac_Crosstrack_Error
            »      2.5
 2040  2049 Perf_Background_Dpkg.Pscurtasvalid
            »     True
 2041  2050 Perf_Background_Dpkg.Psconsider_Hm
            »     True
 2042  2051 Perf_Background_Dpkg.Pshxpxdecel
            »     True
 2043  2052 Perf_Background_Dpkg.Ac_Anti_Ice
            »     True
 2044  2053 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai
            »     True
 2045  2054 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai
            »     True
 2046  2055 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond
            »     True
 2047  2056 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
            »     True
 2048  2057
 2049  2058
 2050  2059  define Get_Cruise_Alt_Called := False
 2051  2060
 2052  2061
 2053  2062 INPUT                                                                                                          VALUE
 2054  2063 --------------------------------------------------------------------------------------------------  ------------------
            » --------
 2055  2064 Perf_Dpkg.takeoff_gwt.valid
```

```
                »     True
 2056   2065 Perf_Dpkg.takeoff_gwt.data
                »    400.0
 2057   2066 Perf_Background_Dpkg.Psgetout
                »     True
 2058   2067 Perf_Background_Dpkg.Ref_Flight_Plan
                »        1
 2059   2068 Perf_Ext_Despath:Body.data_storage(Active).Pgvdespath.Vgavalid
                »     True
 2060   2069 Perf_Despath_Dpkg.Pcdespath.Vgavalid
                »     true
 2061   2070 Perf_Background_Dpkg.Pcitin.Itinerary                                                                    Prim_Fp
                » ln_Preds
 2062   2071 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
                »     True
 2063   2072 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
                »     True
 2064   2073 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
                »    32.20
 2065   2074 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
                »    32.30
 2066   2075 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid
                »    false
 2067   2076 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid
                »    false
 2068   2077 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data
                »     0.00
 2069   2078 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data
                »     0.00
 2070   2079 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.valid
                »    False
 2071   2080 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data
                »      0.0
 2072   2081
 2073   2082
 2074   2083  define Get_Cruise_Alt_Called   := True
 2075   2084  define Get_Cruise_Alt_Called   := True
 2076   2085
 2077   2086
 2078   2087 OUTPUT                                                             EXPECTED              TOLERANCE             ACTUAL
                »           P/F
 2079   2088 ---------------------------------------------------  ----------------------------  -------------  ------------------
                » --------  ----
 2080   2089 Perf_Integration_Dpkg.Psoldnoentgt                                                    0.0          0.001                0.0
```

```
           » 0000E+00  P
2081  2090 Perf_Background_Dpkg.Pcoldcasmchi                               Fmcs_Base_Types.Mach          (N/A)
           »     MACH  P
2082  2091 Perf_Despath_Dpkg.Pcdespath.Vgavalid                                        /= False          (N/A)
           »     TRUE  P
2083  2092 Perf_Background_Dpkg.Psairborne                                                False          (N/A)
           »    FALSE  P
2084  2093 Perf_Background_Dpkg.Psautolat                                                  True          (N/A)
           »     TRUE  P
2085  2094 Perf_Background_Dpkg.Psengout                                                  False          (N/A)
           »    FALSE  P
2086  2095 Perf_Background_Dpkg.Psgetout                                                   TRUE          (N/A)
           »     TRUE  P
2087  2096 Perf_Background_Dpkg.Pcfltphase                                            Preflight          (N/A)                   P
           » REFLIGHT  P
2088  2097 Perf_Background_Dpkg.Pcspeedmode                                Perf_Ext_Tpkg.Vmecon          (N/A)
           »   VMECON  P
2089  2098 Perf_Background_Dpkg.Psinertvs                                                   0.0          0.001                 0.0
           » 0000E+00  P
2090  2099 Perf_Background_Dpkg.Pcpathref                                                Nopath          (N/A)
           »   NOPATH  P
2091  2100 Perf_Background_Dpkg.Pscurtasvalid                                             False          (N/A)
           »    FALSE  P
2092  2101 Perf_Background_Dpkg.Pcacconfig                                                Clean          (N/A)
           »        0  P
2093  2102 Perf_Integration_Dpkg.Pcairbrakes                                             Zeroab          (N/A)
           »   ZEROAB  P
2094  2103 Perf_Background_Dpkg.Pccuraltcstr.Valid                                        False          (N/A)
           »    FALSE  P
2095  2104 Perf_Background_Dpkg.Pcprebcalt.Valid                                          False          (N/A)
           »    FALSE  P
2096  2105 Perf_Background_Dpkg.Psappspdlat                                               False          (N/A)
           »    FALSE  P
2097  2106 Perf_Background_DPkg.Pshmdecel                                                 False          (N/A)
           »    FALSE  P
2098  2107 Perf_Background_Dpkg.Psconsider_Hm                                             False          (N/A)
           »    FALSE  P
2099  2108 Perf_Background_Dpkg.Pshxpxdecel                                               False          (N/A)
           »    FALSE  P
2100  2109 Perf_Background_Dpkg.Psignorehm                                                 True          (N/A)
           »     TRUE  P
2101  2110 Perf_Background_Dpkg.Psstpclbact                                               False          (N/A)
           »    FALSE  P
2102  2111 Perf_Background_Dpkg.Psstpdesact                                               False          (N/A)
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
          »    FALSE  P
2103 2112 Perf_Background_Dpkg.Psenginesoff                                               True         (N/A)
          »     TRUE  P
2104 2113 Perf_Background_Dpkg.Ac_Anti_Ice                                               False         (N/A)
          »    FALSE  P
2105 2114 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                       False         (N/A)
          »    FALSE  P
2106 2115 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                         False         (N/A)
          »    FALSE  P
2107 2116 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                        False         (N/A)
          »    FALSE  P
2108 2117 Prf_Bkgnd_Pkg:BODY.Valcrzalt                Perf_Background_Dpkg.Pscrzalt.Valid         (N/A)
          »     TRUE  P
2109 2118 Perf_Background_Dpkg.Adc_Fg_Valid                                               True         (N/A)
          »     TRUE  P
2110 2119 Prf_Bkgnd_Pkg:body.Fgspdsvalid                                                  True         (N/A)
          »     TRUE  P
2111 2120 Perf_Background_Dpkg.Pcholdflags.Hmdecel                                       False         (N/A)
          »    FALSE  P
2112 2121 Perf_Background_Dpkg.Pcholdflags.Hmactive                                      False         (N/A)
          »    FALSE  P
2113 2122 Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                     False         (N/A)
          »    FALSE  P
2114 2123 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                     False         (N/A)
          »    FALSE  P
2115 2124 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                     False         (N/A)
          »    FALSE  P
2116 2125 Perf_Background_Dpkg.Pcholdflags.Hmdistval                                     False         (N/A)
          »    FALSE  P
2117 2126 Perf_Background_Dpkg.Pcholdflags.Consider_Hm                                   False         (N/A)
          »    FALSE  P
2118 2127 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                       False         (N/A)
          »    FALSE  P
2119 2128 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                      False         (N/A)
          »    FALSE  P
2120 2129 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                                     False         (N/A)
          »    FALSE  P
2121 2130 Perf_Background_Dpkg.Pcgmttime.Hour                                                0         (N/A)
          »        0  P
2122 2131 Perf_Background_Dpkg.Pcgmttime.Minute                                              0         (N/A)
          »        0  P
2123 2132 Perf_Background_Dpkg.Pcgmttime.Second                                              0         (N/A)
          »        0  P
2124 2133 Perf_Background_DPkg.Pscurcas                                                    0.0         0.001                0.0
```

```
           » 0000E+00  P
2125  2134 Perf_Background_DPkg.Pscurmach                                           0.0        0.001              0.0
           » 0000E+00  P
2126  2135 Perf_Background_DPkg.Pscurtas                                            0.0        0.001              0.0
           » 0000E+00  P
2127  2136 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                0.0        0.001              0.0
           » 0000E+00  P
2128  2137 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                               0.0        0.001              0.0
           » 0000E+00  P
2129  2138 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                          False        (N/A)
           »    FALSE  P
2130  2139 Perf_Background_Dpkg.Ac_Crosstrack_Error                                 0.0        0.001              0.0
           » 0000E+00  P
2131  2140 Get_Cruise_Alt_Called                                                   True        (N/A)
           »     TRUE  P
2132  2141 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                          True        (N/A)
           »     TRUE  P
2133  2142 Perf_Background_Dpkg.Noise_Data.Altitude.Data                          300.0        0.001              3.0
           » 0000E+02  P
2134  2143 Perf_Background_Dpkg.Noise_Data.Speed.Valid                            False        (N/A)
           »    FALSE  P
2135  2144 Perf_Background_Dpkg.Secn_Fpln_Itin                                     True        (N/A)
           »     TRUE  P
2136  2145 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid              True        (N/A)
           »     TRUE  P
2137  2146 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid             True        (N/A)
           »     TRUE  P
2138  2147 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data              32.20        0.001              3.2
           » 2000E+01  P
2139  2148 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data             32.30        0.001              3.2
           » 3000E+01  P
2140  2149 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.valid             True        (N/A)
           »     TRUE  P
2141  2150 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data               5.0        0.001              5.0
           » 0000E+00  P
2142  2151
2143  2152
2144  2153 ====> All 62 Comparisons Passed <====
2145  2154
2146  2155
2147  2156 TESTID: 8
2148  2157
2149  2158     If the current VG CAS and Mach targets are valid, and the flight phase is Descent or
2150  2159     Approach, then the Optimum Descent speeds shall be set as follows:
    if the following are true:
      - VG Partially-Limited CAS is non-zero, and Any of the following are true:
        - The A/C is currently in a deceleration, and either:
          - The predictions count is less than or equal to one, or
          - The current working flight plan is Active and the difference between the current prediction sequence
          counter and starting prediction sequence counter is less than or equal to 2, or
          - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
          being processed is Current Mode predictions(Normal or High Priority) ,or
          - First Preds After Insert Temporary indication is True;
        - The A/C is not in Auto Lateral mode,
        - Approach Speeds have been latched.
    then,
      Optimum Descent CAS is set to the VG Partially-Limited CAS
    otherwise,
      Optimum Descent CAS is set to current VG CAS target.
    -- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
    -- VG Partially-Limited CAS is zero.
    -- Optimum Descent CAS is set to current VG CAS target.
    PERF_SDD_2249_INT
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
               PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
               PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
»    False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
```

```
            »     True
2188  2197 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
            »     True
2189  2198 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
            »     True
2190  2199 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
            »     True
2191  2200 Guid_Spds_Dpkg.Vc3prtlimcas
            »      0.0
2192  2201 Perf_Dpkg.Min_Gwt
            »    100.0
2193  2202 Perf_Dpkg.Max_Gwt
            »    400.0
2194  2203 Perf_Background_Dpkg.Flight_Plan_Type                                                                                     I
            » s_Active
2195  2204 Perf_Background_Dpkg.Psignorehm
            »     True
2196  2205 Perf_Background_Dpkg.Pcfltphase
            »  Descent
2197  2206 Perf_Background_Dpkg.Ats_Enable
            »     True
2198  2207 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
            »  Descent
2199  2208 Perf_Background_Dpkg.Psacalt
            »  10000.0
2200  2209 Perf_Database_Dpkg.Psmmo
            »     0.45
2201  2210 Perf_Background_Dpkg.Pszfw
            »    300.0
2202  2211 Perf_Background_Dpkg.Psblockfuel
            »     50.0
2203  2212 Perf_Background_Dpkg.Pstaxifuel
            »     25.0
2204  2213 Perf_Background_Dpkg.Psairborne
            »     True
2205  2214 Perf_Background_Dpkg.Psautolat
            »    False
2206  2215 Guid_Ext_Dpkg.Gcxxlatautoc
            »    False
2207  2216 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
            »    False
2208  2217 Perf_Background_Dpkg.Psengout
            »     True
2209  2218 Cdk_Vert_Dpkg:Body.Engine_Out_I
```

```
                 »     True
 2210   2219 Perf_Background_Dpkg.Pcholdflags.Hmdecel
             »     True
 2211   2220 Perf_Dpkg.Repredict_Hm_Decel
             »     True
 2212   2221 Perf_Background_DPkg.Pshmdecel
             »     True
 2213   2222 Perf_Background_Dpkg.Pcholdflags.Hmactive
             »     True
 2214   2223 Perf_Ads_Dpkg.Fi_Enabled
             »    False
 2215   2224 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
             »    False
 2216   2225 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
             »     True
 2217   2226 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
             »     True
 2218   2227 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
             »     True
 2219   2228 Perf_Background_Dpkg.Pcholdflags.Hmdistval
             »     True
 2220   2229 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
             »     True
 2221   2230 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
             »     True
 2222   2231 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
             »     True
 2223   2232 Perf_Background_Dpkg.Psappspdlat
             »     True
 2224   2233 Perf_Dpkg.Pcengoutprds
             »   Altpln
 2225   2234 Perf_Background_Dpkg.Pcpathref
             »   Onpath
 2226   2235 Guid_Ext_Dpkg.Va3Vertmde                                                                                            Perf_Ext_Tpk
             » g.Vmnone
 2227   2236 Perf_Background_DPkg.Pscurcas
             »      5.0
 2228   2237 Perf_Background_DPkg.Pscurmach
             »      5.0
 2229   2238 Perf_Background_DPkg.Pscurtas
             »      5.0
 2230   2239 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 2231   2240 Perf_Background_Dpkg.Pstogwtval
```

```
           »    False
2232  2241 Perf_Background_Dpkg.Pstogwt
           »     50.0
2233  2242 Perf_Background_Dpkg.Pcgwind
           »  Invalid
2234  2243 Perf_Background_Dpkg.Psgw
           »      0.0
2235  2244 Perf_Dpkg.Gross_Weight.Status
           »    Valid
2236  2245 Perf_Dpkg.Gross_Weight.Data
           »    150.0
2237  2246 Perf_Integration_DPkg.Pcairbrakes
           »   Fullab
2238  2247 Perf_Background_Dpkg.Pcacconfig
           »        5
2239  2248 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
           »    False
2240  2249 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
2241  2250 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    200.0
2242  2251 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
2243  2252 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
2244  2253 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
2245  2254 Perf_Background_Dpkg.Psstpclbact
           »     True
2246  2255 Perf_Background_Dpkg.Psstpdesact
           »     True
2247  2256 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
2248  2257 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
2249  2258 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
2250  2259 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
2251  2260 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
2252  2261 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
2253  2262 Perf_Background_Dpkg.Pcgmttime.Hour
```

```
            »        1
2254  2263  Perf_Background_Dpkg.Pcgmttime.Minute
            »        1
2255  2264  Perf_Background_Dpkg.Pcgmttime.Second
            »        1
2256  2265  Perf_Background_Dpkg.Psinertvs
            »      5.0
2257  2266  Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
            »        0
2258  2267  Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
            »        2
2259  2268  Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
            »        0
2260  2269  Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
            »        2
2261  2270  Perf_Ads_Dpkg.Pr_Enabled
            »    False
2262  2271  ATC_DISCRETES_PKG:body.Adson_Flag
            »    False
2263  2272  CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
            »     true
2264  2273  CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
            »     true
2265  2274  ^Noise_End_Alt_Status                                                                               Takeoff_Alt_Types.
            » Inactive
2266  2275  Perf_Background_Dpkg.Pcactorsec                                                                                      S
            » econdary
2267  2276  Perf_Dpkg.takeoff_gwt.valid
            »     True
2268  2277  Perf_Dpkg.takeoff_gwt.data
            »    400.0
2269  2278
2270  2279
2271  2280  OUTPUT                                                          EXPECTED               TOLERANCE             ACTUAL
            »           P/F
2272  2281  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
2273  2282  Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                False          (N/A)
            »    FALSE  P
2274  2283  Perf_Background_Dpkg.Noise_Data.Speed.Valid                                   False          (N/A)
            »    FALSE  P
2275  2284  Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                     345.0          0.001                3.4
            » 5000E+02  P
2276  2285  Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                                     0.65          0.001                6.5
```

```
» 0000E-01  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                 False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                       True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                         True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                        True          (N/A)
»     TRUE  P


====> All 8 Comparisons Passed <====


TESTID: 9

    If the current VG CAS and Mach targets are valid, and the flight phase is Descent or Approach, then the Optimum De
» scent Mach
    shall be set as follows:if the flight phase is Descent, then Optimum Descent Mach is set to current VG Mach target
» ;otherwise,
    if Real-Time computed Economy Descent speeds are invalid, then Optimum Descent Mach is set to MMO.

    the current flight phase is not climb then:
    the real time climb speeds are valid for current working flight plan then Optimum Econ/LRC climb CAS and Mach are
    not set to the real time climb CAS and Mach speeds respectively for the current working flight plan.
    Flag indicating the speed targets from FG are valid (Fgspdsvalid) is not set to False.
    PERF_SDD_2276_INT, PERF_SDD_08226(PERF_SRD_2801,PERF_SRD_23365,PERF_SRD_23455),
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
               PERF_SRD_10200_INT, PERF_SRD_10199_INT, PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
               PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.

    PERF_SDD_4328 (PERF_SRD_10166_INT)

    The Tailwind, Crosswind and their validity at destination along the runway axis shall be retrieved
    for the working flight plan.
    PERF_SDD_07188_INT


INPUT                                                                                                         VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2313  2322 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
           »    False
2314  2323 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
           »    False
2315  2324 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
           »    False
2316  2325 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
           »    False
2317  2326 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
           »    False
2318  2327 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
           »     True
2319  2328 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »     True
2320  2329 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
2321  2330 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
2322  2331 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
2323  2332 Perf_Background_Dpkg.Pcactorsec
           »   Active
2324  2333 Perf_Background_Dpkg.Dest_Wind_Components.Dest_Wind_Valid
           »    False
2325  2334 Perf_Background_Dpkg.Dest_Wind_Components.Psvcdu
           »      0.0
2326  2335 Perf_Background_Dpkg.Dest_Wind_Components.Psvcdy
           »      0.0
2327  2336 Perf_Retained_Dpkg.Psvcdu(Active).Valid
           »     True
2328  2337 Perf_Retained_Dpkg.Psvcdu(Active).Data
           »     1.01
2329  2338 Perf_Retained_Dpkg.Psvcdy(Active).Data
           »     1.01
2330  2339 Perf_Dpkg.Min_Gwt
           »    100.0
2331  2340 Perf_Dpkg.Max_Gwt
           »    400.0
2332  2341 Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
           » s_Active
2333  2342 Perf_Background_Dpkg.Psignorehm
           »     True
2334  2343 Perf_Background_Dpkg.Pcfltphase
           » Approach
```

```
2335  2344 Perf_Background_Dpkg.Ats_Enable
           »     True
2336  2345 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           » Approach
2337  2346 Perf_Background_Dpkg.Psacalt
           »  10000.0
2338  2347 Perf_Database_Dpkg.Psmmo
           »     0.45
2339  2348 Perf_Background_Dpkg.Pszfw
           »    300.0
2340  2349 Perf_Background_Dpkg.Psblockfuel
           »     50.0
2341  2350 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
2342  2351 Perf_Background_Dpkg.Psairborne
           »     True
2343  2352 Perf_Background_Dpkg.Psautolat
           »    False
2344  2353 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
2345  2354 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
2346  2355 Perf_Background_Dpkg.Psengout
           »     True
2347  2356 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
2348  2357 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
2349  2358 Perf_Dpkg.Repredict_Hm_Decel
           »     True
2350  2359 Perf_Background_DPkg.Pshmdecel
           »     True
2351  2360 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
2352  2361 Perf_Ads_Dpkg.Fi_Enabled
           »    False
2353  2362 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
2354  2363 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
2355  2364 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
2356  2365 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 2357   2366 Perf_Background_Dpkg.Pcholdflags.Hmdistval
             »     True
 2358   2367 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
             »     True
 2359   2368 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
             »     True
 2360   2369 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
             »     True
 2361   2370 Perf_Background_Dpkg.Psappspdlat
             »     True
 2362   2371 Perf_Dpkg.Pcengoutprds
             »   Altpln
 2363   2372 Perf_Background_Dpkg.Pcpathref
             »   Onpath
 2364   2373 Guid_Ext_Dpkg.Va3Vertmde                                                                                             Perf_Ext_Tpk
             » g.Vmnone
 2365   2374 Perf_Background_DPkg.Pscurcas
             »      5.0
 2366   2375 Perf_Background_DPkg.Pscurmach
             »      5.0
 2367   2376 Perf_Background_DPkg.Pscurtas
             »      5.0
 2368   2377 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 2369   2378 Perf_Background_Dpkg.Pstogwtval
             »    False
 2370   2379 Perf_Background_Dpkg.Pstogwt
             »     50.0
 2371   2380 Perf_Background_Dpkg.Pcgwind
             »  Invalid
 2372   2381 Perf_Background_Dpkg.Psgw
             »      0.0
 2373   2382 Perf_Dpkg.Gross_Weight.Status
             »    Valid
 2374   2383 Perf_Dpkg.Gross_Weight.Data
             »    150.0
 2375   2384 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 2376   2385 Perf_Background_Dpkg.Pcacconfig
             »        5
 2377   2386 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »    False
 2378   2387 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2379  2388 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    200.0
2380  2389 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »     True
2381  2390 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
2382  2391 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
2383  2392 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Valid
           »     True
2384  2393 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Cas
           »    266.0
2385  2394 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Mach
           »     0.56
2386  2395 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
           »     True
2387  2396 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas
           »    267.0
2388  2397 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach
           »     0.57
2389  2398 Perf_Background_Dpkg.Psstpclbact
           »     True
2390  2399 Perf_Background_Dpkg.Psstpdesact
           »     True
2391  2400 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
2392  2401 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
2393  2402 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
2394  2403 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
2395  2404 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
2396  2405 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
2397  2406 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
2398  2407 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
2399  2408 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
2400  2409 Perf_Background_Dpkg.Psinertvs
           »      5.0
```

```
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
»        0
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
»        2
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
»        0
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
»        2
Perf_Ads_Dpkg.Pr_Enabled
»    False
ATC_DISCRETES_PKG:body.Adson_Flag
»    False
Perf_Ads_Dpkg.Ii_Enabled
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
»     true
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
»     true
^Noise_End_Alt_Status                                                                   Takeoff_Alt_Types.
» Inactive
Perf_Dpkg.takeoff_gwt.valid
»     True
Perf_Dpkg.takeoff_gwt.data
»    400.0
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
»     True
Prf_Bkgnd_Pkg:body.Fgspdsvalid
»     True
Perf_Background_Dpkg.Psecncrzmach
»      0.0
Perf_Background_Dpkg.Psecncrzcas
»      0.0


OUTPUT                                                          EXPECTED              TOLERANCE            ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  -------------  ------------------
» --------  ----
Perf_Speeds(Active)(Cruise).Valid                                             TRUE          (N/A)
»     TRUE  P
Perf_Speeds(Active)(Climb).Valid                                              TRUE          (N/A)
»     TRUE  P
Perf_Speeds(Active)(Descent).Valid                                            TRUE          (N/A)
»     TRUE  P
```

```
2424  2433 Perf_Speeds(Active)(Climb).Mach                                     0.56          0.001                5.6
           » 0000E-01  P
2425  2434 Perf_Speeds(Active)(Climb).Cas                                     266.0          0.001                2.6
           » 6000E+02  P
2426  2435 Perf_Speeds(Active)(Cruise).Mach                                    0.57          0.001                5.7
           » 0000E-01  P
2427  2436 Perf_Speeds(Active)(Cruise).Cas                                    267.0          0.001                2.6
           » 7000E+02  P
2428  2437 Perf_Speeds(Active)(Descent).Mach                                   0.55          0.001                5.5
           » 0000E-01  P
2429  2438 Perf_Speeds(Active)(Descent).Cas                                   265.0          0.001                2.6
           » 5000E+02  P
2430  2439 Prf_Bkgnd_Pkg:body.Fgspdsvalid                                      True          (N/A)
           »     TRUE  P
2431  2440 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                         345.0          0.001                3.4
           » 5000E+02  P
2432  2441 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                          0.55          0.001                5.5
           » 0000E-01  P
2433  2442 Perf_Ads_Dpkg.Ii_Enabled                                           False          (N/A)
           »    FALSE  P
2434  2443 Perf_Ads_Dpkg.Pr_Enabled                                           False          (N/A)
           »    FALSE  P
2435  2444 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                      False          (N/A)
           »    FALSE  P
2436  2445 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                           True          (N/A)
           »     TRUE  P
2437  2446 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                             True          (N/A)
           »     TRUE  P
2438  2447 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                            True          (N/A)
           »     TRUE  P
2439  2448
2440  2449
2441  2450 INPUT                                                                                              VALUE
2442  2451 -------------------------------------------------------------------------------------------  ------------------
           » --------
2443  2452 Perf_Background_Dpkg.Dest_Wind_Components.Dest_Wind_Valid
           »     True
2444  2453 Perf_Background_Dpkg.Dest_Wind_Components.Psvcdu
           »     1.01
2445  2454 Perf_Background_Dpkg.Dest_Wind_Components.Psvcdy
           »     1.01
2446  2455
2447  2456
2448  2457 OUTPUT                                                        EXPECTED              TOLERANCE          ACTUAL
```

```
            »           P/F
2449  2458  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
2450  2459  Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                False          (N/A)
            »    FALSE  P
2451  2460  Perf_Background_Dpkg.Noise_Data.Speed.Valid                                   False          (N/A)
            »    FALSE  P
2452  2461  Perf_Background_Dpkg.Psecncrzmach                                               0.0          0.001                 0.0
            » 0000E+00  P
2453  2462  Perf_Background_Dpkg.Psecncrzcas                                                0.0          0.001                 0.0
            » 0000E+00  P
2454  2463
2455  2464
2456  2465  ====> All 22 Comparisons Passed <====
2457  2466
2458  2467
2459  2468  TESTID: 10
2460  2469
2461  2470      If the current VG CAS and Mach targets are valid, and the flight phase is Descent or Approach, then the Optimum De
            » scent Mach
2462  2471      shall be set as follows:if the flight phase is Descent, then Optimum Descent Mach is set to current VG Mach target
            » ;otherwise,
2463  2472      if Real-Time computed Economy Descent speeds are invalid, then Optimum Descent Mach is set to MMO.
2464  2473      PERF_SDD_2276_INT, PERF_SDD_2853_INT, PERF_SDD_2293_INT
2465  2474      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
2466  2475                 PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
2467  2476                 PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
2468  2477
2469  2478      The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
2470  2479      working flight plan.
2471  2480      PERF_SDD_4328 (PERF_SRD_10166_INT)
2472  2481
2473  2482
2474  2483  INPUT                                                                                                          VALUE
2475  2484  --------------------------------------------------------------------------------------------------  ------------------
            » --------
2476  2485  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
            »    False
2477  2486  CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
            »    False
2478  2487  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
            »    False
2479  2488  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
            »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2480  2489 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
           »    False
2481  2490 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
           »     True
2482  2491 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »     True
2483  2492 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
2484  2493 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
2485  2494 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
2486  2495 Perf_Dpkg.Min_Gwt
           »    100.0
2487  2496 Perf_Dpkg.Max_Gwt
           »    400.0
2488  2497 Perf_Background_Dpkg.Flight_Plan_Type                                                                                   I
           » s_Active
2489  2498 Perf_Background_Dpkg.Psignorehm
           »     True
2490  2499 Perf_Background_Dpkg.Pcfltphase
           » Approach
2491  2500 Perf_Background_Dpkg.Ats_Enable
           »     True
2492  2501 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           » Approach
2493  2502 Perf_Background_Dpkg.Psacalt
           »  10000.0
2494  2503 Perf_Database_Dpkg.Psmmo
           »     0.45
2495  2504 Perf_Background_Dpkg.Pszfw
           »    300.0
2496  2505 Perf_Background_Dpkg.Psblockfuel
           »     50.0
2497  2506 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
2498  2507 Perf_Background_Dpkg.Psairborne
           »     True
2499  2508 Perf_Background_Dpkg.Psautolat
           »    False
2500  2509 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
2501  2510 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2502  2511 Perf_Background_Dpkg.Psengout
           »     True
2503  2512 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
2504  2513 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
2505  2514 Perf_Dpkg.Repredict_Hm_Decel
           »     True
2506  2515 Perf_Background_DPkg.Pshmdecel
           »     True
2507  2516 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
2508  2517 Perf_Ads_Dpkg.Fi_Enabled
           »    False
2509  2518 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
2510  2519 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
2511  2520 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
2512  2521 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
2513  2522 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
2514  2523 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
2515  2524 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
2516  2525 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
2517  2526 Perf_Background_Dpkg.Psappspdlat
           »     True
2518  2527 Perf_Dpkg.Pcengoutprds
           »   Altpln
2519  2528 Perf_Background_Dpkg.Pcpathref
           »   Onpath
2520  2529 Guid_Ext_Dpkg.Va3Vertmde                                                                                Perf_Ext_Tpk
           » g.Vmnone
2521  2530 Perf_Background_DPkg.Pscurcas
           »      5.0
2522  2531 Perf_Background_DPkg.Pscurmach
           »      5.0
2523  2532 Perf_Background_DPkg.Pscurtas
           »      5.0
```

```
2524  2533 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     True
2525  2534 Perf_Background_Dpkg.Pstogwtval
           »    False
2526  2535 Perf_Background_Dpkg.Pstogwt
           »     50.0
2527  2536 Perf_Background_Dpkg.Pcgwind
           »  Invalid
2528  2537 Perf_Background_Dpkg.Psgw
           »      0.0
2529  2538 Perf_Dpkg.Gross_Weight.Status
           »    Valid
2530  2539 Perf_Dpkg.Gross_Weight.Data
           »    150.0
2531  2540 Perf_Integration_DPkg.Pcairbrakes
           »   Fullab
2532  2541 Perf_Background_Dpkg.Pcacconfig
           »        5
2533  2542 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
           »    False
2534  2543 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
2535  2544 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    200.0
2536  2545 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
2537  2546 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
2538  2547 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
2539  2548 Perf_Background_Dpkg.Psstpclbact
           »     True
2540  2549 Perf_Background_Dpkg.Psstpdesact
           »     True
2541  2550 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
2542  2551 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
2543  2552 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
2544  2553 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
2545  2554 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
```

```
  2546   2555 Perf_Background_Dpkg.Pcprebcalt.Valid
              »     True
  2547   2556 Perf_Background_Dpkg.Pcgmttime.Hour
              »        1
  2548   2557 Perf_Background_Dpkg.Pcgmttime.Minute
              »        1
  2549   2558 Perf_Background_Dpkg.Pcgmttime.Second
              »        1
  2550   2559 Perf_Background_Dpkg.Psinertvs
              »      5.0
  2551   2560 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
              »        0
  2552   2561 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
              »        2
  2553   2562 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
              »        0
  2554   2563 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
              »        2
  2555   2564 Perf_Ads_Dpkg.Pr_Enabled
              »    False
  2556   2565 ATC_DISCRETES_PKG:body.Adson_Flag
              »    False
  2557   2566 Perf_Ads_Dpkg.Ii_Enabled
              »     True
  2558   2567 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
              »     true
  2559   2568 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
              »     true
  2560   2569 ^Noise_End_Alt_Status                                                                       Takeoff_Alt_Types.
              » Inactive
  2561   2570 Perf_Dpkg.takeoff_gwt.valid
              »     True
  2562   2571 Perf_Dpkg.takeoff_gwt.data
              »    400.0
  2563   2572 
  2564   2573 
  2565   2574 OUTPUT                                                          EXPECTED                TOLERANCE              ACTUAL
              »           P/F
  2566   2575 ----------------------------------------------------  -----------------------------  -------------  ------------------
              » --------  ----
  2567   2576 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                              False          (N/A)
              »    FALSE  P
  2568   2577 Perf_Background_Dpkg.Noise_Data.Speed.Valid                                 False          (N/A)
              »    FALSE  P
```

```
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                     345.0          0.001                  3.4
» 5000E+02  P
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                                     0.45          0.001                  4.5
» 0000E-01  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec              False          (N/A)
»    FALSE  P
Perf_Ads_Dpkg.Ii_Enabled                                                      False          (N/A)
»    FALSE  P
Perf_Ads_Dpkg.Pr_Enabled                                                      False          (N/A)
»    FALSE  P
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                 False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                       True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                         True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                        True          (N/A)
»     TRUE  P


====> All 11 Comparisons Passed <====


TESTID: 11

    Verify that for a secondary flight plan relevant plags are set so HM legs will be ignored.  Also, when current iti
» n is
    active primary flight plan preds and ADS enabled flag is true Get_Requested_Num_Waypoints is called.
    PERF_SDD_4795(PERF_SRD_1590, PERF_SRD_6012), PERF_SDD_3482_INT, PERF_SDD_2852_INT, PERF_SDD_2174_INT, PERF_SDD_217
» 7_INT,
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
    PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
    PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    The GMT time snapshot taken at the beginning of the pass of predictions is stored with the Perf ADS Predicted Rout
» e
    information for use as the Predictions Reference GMT.
    PERF_SDD_3718 (PERF_SRD_8964_INT)

    The number of requested Predicted Route waypoints is 0 (Zero) and valid Predicted data resides in the Predicted Ro
```

```
                » ute
 2601   2610        Buffer. Verify the Perf Predicted Route Buffer is invalidated and stored into the ADS Interface for IO's use.
 2602   2611        PERF_SDD_3887 (PERF_SRD_8976_INT)
 2603   2612
 2604   2613        If the current itinerary is one of the following:
 2605   2614        - Active Primary Flight Plan Predictions;
 2606   2615        - Temporary Primary Flight Plan Predictions;
 2607   2616        -Current mode predictions(Normal or High priority);
 2608   2617        - Optimum altitude predictions;
 2609   2618        then the descent path shall be retrieved from the descent path object
 2610   2619        manager via a call to Perf_Ext_Despath.Pgvdespath.
 2611   2620        PERF_SDD_3888_INT
 2612   2621
 2613   2622        If there is no speed mode valid, then speed mode shall be set to economy mode.
 2614   2623        PERF_SDD_07546_INT
 2615   2624
 2616   2625
 2617   2626    INPUT                                                                                                     VALUE
 2618   2627    ---------------------------------------------------------------------------------------------------  ------------------
                » --------
 2619   2628    CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
                »    False
 2620   2629    CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
                »    False
 2621   2630    CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
                »    False
 2622   2631    CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
                »    False
 2623   2632    CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
                »    False
 2624   2633    CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
                »     True
 2625   2634    CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
                »     True
 2626   2635    CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
                »     True
 2627   2636    CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
                »     True
 2628   2637    CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
                »     True
 2629   2638    Perf_Dpkg.Min_Gwt
                »    100.0
 2630   2639    Perf_Dpkg.Max_Gwt
                »    400.0
```

```
2631  2640 Perf_Background_Dpkg.Pcactorsec                                                              S
           » econdary
2632  2641 Perf_Background_Dpkg.Psignorehm
           »    False
2633  2642 Perf_Background_Dpkg.Flight_Plan_Type                                                Copy_Fro
           » m_Active
2634  2643 Perf_Background_Dpkg.Pcfltphase
           » Approach
2635  2644 Perf_Background_Dpkg.Ats_Enable
           »     True
2636  2645 Perf_Background_Dpkg.Pcitin.Flight_Plan
           »   Active
2637  2646 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           » Approach
2638  2647 Perf_Background_Dpkg.Psacalt
           »  10000.0
2639  2648 Perf_Database_Dpkg.Psmmo
           »     0.45
2640  2649 Perf_Background_Dpkg.Pszfw
           »    300.0
2641  2650 Perf_Background_Dpkg.Psblockfuel
           »     50.0
2642  2651 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
2643  2652 Perf_Background_Dpkg.Psairborne
           »     True
2644  2653 Perf_Background_Dpkg.Psautolat
           »    False
2645  2654 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
2646  2655 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
2647  2656 Perf_Background_Dpkg.Psengout
           »     True
2648  2657 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
2649  2658 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
2650  2659 Perf_Dpkg.Repredict_Hm_Decel
           »     True
2651  2660 Perf_Background_DPkg.Pshmdecel
           »     True
2652  2661 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
```

```
2653  2662 Perf_Ads_Dpkg.Fi_Enabled
           »    False
2654  2663 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
2655  2664 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
2656  2665 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
2657  2666 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
2658  2667 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
2659  2668 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
2660  2669 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
2661  2670 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
2662  2671 Perf_Background_Dpkg.Psappspdlat
           »     True
2663  2672 Perf_Dpkg.Pcengoutprds
           »   Altpln
2664  2673 Perf_Background_Dpkg.Pcpathref
           »   Onpath
2665  2674 Guid_Ext_Dpkg.Va3Vertmde                                                                                            Perf_Ext_Tpk
           » g.Vmnone
2666  2675 Perf_Background_DPkg.Pscurcas
           »      5.0
2667  2676 Perf_Background_DPkg.Pscurmach
           »      5.0
2668  2677 Perf_Background_DPkg.Pscurtas
           »      5.0
2669  2678 Perf_Background_Dpkg.Pcitin.Itinerary                                                                                     Prim_Fp
           » ln_Preds
2670  2679 Perf_Background_Dpkg.Psenginesoff
           »     True
2671  2680 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     True
2672  2681 Perf_Background_Dpkg.Pstogwtval
           »    False
2673  2682 Perf_Background_Dpkg.Pstogwt
           »     50.0
2674  2683 Perf_Background_Dpkg.Pcgwind
           »  Invalid
```

```
2675  2684 Perf_Background_Dpkg.Psgw
           »      0.0
2676  2685 Perf_Dpkg.Gross_Weight.Status
           »    Valid
2677  2686 Perf_Dpkg.Gross_Weight.Data
           »    150.0
2678  2687 Perf_Integration_DPkg.Pcairbrakes
           »   Fullab
2679  2688 Perf_Background_Dpkg.Pcacconfig
           »        5
2680  2689 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
           »    False
2681  2690 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
2682  2691 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    200.0
2683  2692 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
2684  2693 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
2685  2694 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
2686  2695 Perf_Background_Dpkg.Psstpclbact
           »     True
2687  2696 Perf_Background_Dpkg.Psstpdesact
           »     True
2688  2697 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
2689  2698 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
2690  2699 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
2691  2700 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
2692  2701 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
2693  2702 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
2694  2703 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
2695  2704 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
2696  2705 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2697  2706 Perf_Background_Dpkg.Psinertvs
           »      5.0
2698  2707 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
           »        0
2699  2708 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
           »        2
2700  2709 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
2701  2710 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
2702  2711 Perf_Ads_Dpkg.Pr_Enabled
           »    False
2703  2712 ATC_DISCRETES_PKG:body.Adson_Flag
           »    False
2704  2713 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid
           »     True
2705  2714 Perf_Ads_Dpkg.Ii_Enabled
           »     True
2706  2715 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »     true
2707  2716 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »     true
2708  2717 ^Noise_End_Alt_Status                                                                                                    Takeoff_Alt_Type
           » s.Active
2709  2718 ^Noise_Speed_Val
           »    False
2710  2719 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints
           »      (5)
2711  2720 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas
           »    330.0
2712  2721 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt
           »  15500.0
2713  2722 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type                                                                    Vg_Ext_Tpkg.Des
           » _Spd_Lim
2714  2723 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident                                                                                       "
           » ABCDEFG"
2715  2724 Perf_Dpkg.takeoff_gwt.valid
           »     True
2716  2725 Perf_Dpkg.takeoff_gwt.data
           »    400.0
2717  2726 Perf_Background_Dpkg.Speed_Annunciation.Cas
           »      0.0
2718  2727 Perf_Background_Dpkg.Speed_Annunciation.Alt
           »      0.0
```

```
2719  2728  Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type                                                     Vg_Ext_Tpkg
            » .Invalid
2720  2729  Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                                                                    "
            »        "
2721  2730  Perf_Background_Dpkg.Pcholdflags.Consider_Hm
            »     True
2722  2731  Perf_Background_Dpkg.Psconsider_Hm
            »     True
2723  2732  Perf_Background_Dpkg.Pshxpxdecel
            »     True
2724  2733
2725  2734
2726  2735  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
2727  2736  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
2728  2737  Perf_Background_Dpkg.Pcholdflags.Hmdecel                                      False          (N/A)
            »    FALSE  P
2729  2738  Perf_Background_Dpkg.Pcholdflags.Consider_Hm                                  False          (N/A)
            »    FALSE  P
2730  2739  Perf_Background_Dpkg.Pcholdflags.Hmactive                                     False          (N/A)
            »    FALSE  P
2731  2740  Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                    False          (N/A)
            »    FALSE  P
2732  2741  Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                    False          (N/A)
            »    FALSE  P
2733  2742  Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                    False          (N/A)
            »    FALSE  P
2734  2743  Perf_Background_Dpkg.Pcholdflags.Hmdistval                                    False          (N/A)
            »    FALSE  P
2735  2744  Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                      False          (N/A)
            »    FALSE  P
2736  2745  Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                     False          (N/A)
            »    FALSE  P
2737  2746  Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                                    False          (N/A)
            »    FALSE  P
2738  2747  Perf_Background_DPkg.Pshmdecel                                                False          (N/A)
            »    FALSE  P
2739  2748  Perf_Background_Dpkg.Psappspdlat                                              False          (N/A)
            »    FALSE  P
2740  2749  Perf_Background_Dpkg.Psconsider_Hm                                            False          (N/A)
            »    FALSE  P
2741  2750  Perf_Background_Dpkg.Pshxpxdecel                                              False          (N/A)
            »    FALSE  P
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2742  2751 Perf_Background_Dpkg.Psignorehm                                            True           (N/A)
           »     TRUE  P
2743  2752 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec            True           (N/A)
           »     TRUE  P
2744  2753 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints                     5           (N/A)
           »        5  P
2745  2754 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints                     0           (N/A)
           »        0  P
2746  2755 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points                        0           (N/A)
           »        0  P
2747  2756 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points                        2           (N/A)
           »        2  P
2748  2757 Perf_Ads_Dpkg.Ii_Enabled                                                  False           (N/A)
           »    FALSE  P
2749  2758 Perf_Ads_Dpkg.Pr_Enabled                                                   True           (N/A)
           »     TRUE  P
2750  2759 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                             False           (N/A)
           »    FALSE  P
2751  2760 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                   True           (N/A)
           »     TRUE  P
2752  2761 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                     True           (N/A)
           »     TRUE  P
2753  2762 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                    True           (N/A)
           »     TRUE  P
2754  2763 Perf_Background_Dpkg.Speed_Annunciation.Cas                               330.0           0.001                3.3
           » 0000E+02  P
2755  2764 Perf_Background_Dpkg.Speed_Annunciation.Alt                             15500.0           0.001                1.5
           » 5000E+04  P
2756  2765 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type      Vg_Ext_Tpkg.Des_Spd_Lim           (N/A)                DES
           » _SPD_LIM  P
2757  2766 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                       "ABCDEFG"           (N/A)                  "
           » ABCDEFG"  P
2758  2767 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec                            True           (N/A)
           »     TRUE  P
2759  2768 Perf_Background_Dpkg.Pcspeedmode                                 Perf_Ext_Tpkg.Vmecon           (N/A)
           »   VMECON  P
2760  2769
2761  2770
2762  2771 ====> All 32 Comparisons Passed <====
2763  2772
2764  2773
2765  2774 TESTID: 12
2766  2775
2767  2776     ADS Enabled flag is set for Intermediate Intent Buffer Predictions.
```

```
2768  2777     PERF_SDD_2123_INT, PERF_SDD_2174_INT, PERF_SDD_2177_INT
2769  2778     PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
2770  2779                PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
2771  2780                PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
2772  2781
2773  2782     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
2774  2783     working flight plan.
2775  2784     PERF_SDD_4328 (PERF_SRD_10166_INT)
2776  2785
2777  2786     The GMT time snapshot taken at the beginning of the pass of predictions is stored with the Perf ADS Predicted Rout
             » e
2778  2787     information for use as the Predictions Reference GMT.
2779  2788     PERF_SDD_3718 (PERF_SRD_8964_INT)
2780  2789
2781  2790     The number of requested Predicted Route waypoints is 0 (Zero) and valid Predicted data resides in the Predicted Ro
             » ute
2782  2791     Buffer. Verify the Perf Predicted Route Buffer is invalidated and stored into the ADS Interface for IO's use.
2783  2792     PERF_SDD_3887 (PERF_SRD_8976_INT)
2784  2793
2785  2794     If all of the following conditions are met, the number of requested Intermediate Intent Waypoints shall be set to
             » maximum
2786  2795       number of intermediate intent points(10) and number of predicted Intermediate Intent Waypoints is set to zero:
2787  2796       The current itinerary is Active Primary Flight Plan Predictions
2788  2797       This is not the first pass of active primary flight plan predictions
2789  2798       OPC ATS-enabled flag is true
2790  2799       ADS ON is true
2791  2800     PERF_SDD_07160_INT
2792  2801
2793  2802
2794  2803 INPUT                                                                                                      VALUE
2795  2804 ------------------------------------------------------------------------------------------------  ------------------
             » --------
2796  2805 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
             »    False
2797  2806 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
             »    False
2798  2807 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
             »    False
2799  2808 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
             »    False
2800  2809 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
             »    False
2801  2810 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
             »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2802  2811 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »     True
2803  2812 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
2804  2813 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
2805  2814 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
2806  2815 Perf_Dpkg.Min_Gwt
           »    100.0
2807  2816 Perf_Dpkg.Max_Gwt
           »    400.0
2808  2817 Perf_Background_Dpkg.Pcactorsec                                                                                 S
           » econdary
2809  2818 Perf_Background_Dpkg.Psignorehm
           »     True
2810  2819 Perf_Background_Dpkg.Flight_Plan_Type                                                                   Copy_Fro
           » m_Active
2811  2820 Perf_Background_Dpkg.Pcfltphase
           » Approach
2812  2821 Perf_Background_Dpkg.Ats_Enable
           »     True
2813  2822 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           » Approach
2814  2823 Perf_Background_Dpkg.Psacalt
           »  10000.0
2815  2824 Perf_Database_Dpkg.Psmmo
           »     0.45
2816  2825 Perf_Background_Dpkg.Pszfw
           »    300.0
2817  2826 Perf_Background_Dpkg.Psblockfuel
           »     50.0
2818  2827 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
2819  2828 Perf_Background_Dpkg.Psairborne
           »     True
2820  2829 Perf_Background_Dpkg.Psautolat
           »    False
2821  2830 Guid_Ext_Dpkg.Gcxxlatautoc
           »     True
2822  2831 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
2823  2832 Perf_Background_Dpkg.Psengout
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2824  2833 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
2825  2834 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
2826  2835 Perf_Dpkg.Repredict_Hm_Decel
           »     True
2827  2836 Perf_Background_DPkg.Pshmdecel
           »     True
2828  2837 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
2829  2838 Perf_Ads_Dpkg.Fi_Enabled
           »     True
2830  2839 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
2831  2840 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
2832  2841 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
2833  2842 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
2834  2843 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
2835  2844 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
2836  2845 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
2837  2846 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
2838  2847 Perf_Background_Dpkg.Psappspdlat
           »     True
2839  2848 Perf_Dpkg.Pcengoutprds
           »   Altpln
2840  2849 Perf_Background_Dpkg.Pcpathref
           »   Onpath
2841  2850 Guid_Ext_Dpkg.Va3Vertmde                                                                    Perf_Ext_Tpk
           » g.Vmnone
2842  2851 Perf_Background_DPkg.Pscurcas
           »      5.0
2843  2852 Perf_Background_DPkg.Pscurmach
           »      5.0
2844  2853 Perf_Background_DPkg.Pscurtas
           »      5.0
2845  2854 Perf_Background_Dpkg.Pcitin.Itinerary                                                            Prim_Fp
           » ln_Preds
```

```
 2846  2855 Perf_Background_Dpkg.Psenginesoff
            »     True
 2847  2856 Perf_Despath_Dpkg.Pcdespath.Vgavalid
            »     True
 2848  2857 Perf_Background_Dpkg.Pstogwtval
            »    False
 2849  2858 Perf_Background_Dpkg.Pstogwt
            »     50.0
 2850  2859 Perf_Background_Dpkg.Pcgwind
            »  Invalid
 2851  2860 Perf_Background_Dpkg.Psgw
            »      0.0
 2852  2861 Perf_Dpkg.Gross_Weight.Status
            »    Valid
 2853  2862 Perf_Dpkg.Gross_Weight.Data
            »    150.0
 2854  2863 Perf_Integration_DPkg.Pcairbrakes
            »   Fullab
 2855  2864 Perf_Background_Dpkg.Pcacconfig
            »        5
 2856  2865 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
            »    False
 2857  2866 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
            »   9000.0
 2858  2867 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
            »    400.0
 2859  2868 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
            »    False
 2860  2869 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
            »    265.0
 2861  2870 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
            »     0.55
 2862  2871 Perf_Background_Dpkg.Psstpclbact
            »     True
 2863  2872 Perf_Background_Dpkg.Psstpdesact
            »     True
 2864  2873 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
            »      0.0
 2865  2874 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
            »      0.0
 2866  2875 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
            »     0.65
 2867  2876 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
            »    345.0
```

```
2868  2877 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
2869  2878 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
2870  2879 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
2871  2880 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
2872  2881 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
2873  2882 Perf_Background_Dpkg.Psinertvs
           »      5.0
2874  2883 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
           »        0
2875  2884 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
           »        2
2876  2885 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
2877  2886 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
2878  2887 Perf_Ads_Dpkg.Pr_Enabled
           »    False
2879  2888 ATC_DISCRETES_PKG:body.Adson_Flag
           »     True
2880  2889 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid
           »     True
2881  2890 Perf_Ads_Dpkg.Ii_Enabled
           »    False
2882  2891 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »     true
2883  2892 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »     true
2884  2893 ^Noise_End_Alt_Status                                                                Takeoff_Alt_Type
           » s.Active
2885  2894 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints
           »      (5)
2886  2895 Perf_Dpkg.takeoff_gwt.valid
           »     True
2887  2896 Perf_Dpkg.takeoff_gwt.data
           »    400.0
2888  2897
2889  2898
2890  2899 OUTPUT                                                         EXPECTED              TOLERANCE              ACTUAL
           »           P/F
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
2891   2900 ---------------------------------------------------  ----------------------------  ------------  -----------------
            » --------  ----
2892   2901 Perf_Background_Dpkg.Pcholdflags.Hmactive                                    False          (N/A)
            »    FALSE  P
2893   2902 Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                   False          (N/A)
            »    FALSE  P
2894   2903 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                   False          (N/A)
            »    FALSE  P
2895   2904 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                   False          (N/A)
            »    FALSE  P
2896   2905 Perf_Background_Dpkg.Pcholdflags.Hmdistval                                   False          (N/A)
            »    FALSE  P
2897   2906 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                     False          (N/A)
            »    FALSE  P
2898   2907 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                    False          (N/A)
            »    FALSE  P
2899   2908 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                                   False          (N/A)
            »    FALSE  P
2900   2909 Perf_Background_DPkg.Pshmdecel                                               False          (N/A)
            »    FALSE  P
2901   2910 Perf_Background_Dpkg.Psappspdlat                                             False          (N/A)
            »    FALSE  P
2902   2911 Perf_Background_Dpkg.Psignorehm                                               True          (N/A)
            »     TRUE  P
2903   2912 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec              True          (N/A)
            »     TRUE  P
2904   2913 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints                       5          (N/A)
            »        5  P
2905   2914 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints                       0          (N/A)
            »        0  P
2906   2915 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points                         10          (N/A)
            »       10  P
2907   2916 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points                          0          (N/A)
            »        0  P
2908   2917 Perf_Ads_Dpkg.Ii_Enabled                                                      True          (N/A)
            »     TRUE  P
2909   2918 Perf_Ads_Dpkg.Pr_Enabled                                                      True          (N/A)
            »     TRUE  P
2910   2919 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                False          (N/A)
            »    FALSE  P
2911   2920 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                      True          (N/A)
            »     TRUE  P
2912   2921 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                        True          (N/A)
            »     TRUE  P
```

```
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                         True          (N/A)
»     TRUE  P


====> All 22 Comparisons Passed <====


TESTID: 13

    A/C is in Cruise and current itin is active primary so target speed is limited by calling the speed envelope modul
» e.
    PERF_SDD_3055_INT, PERF_SDD_2174_INT, PERF_SDD_2177_INT
    PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
               PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
               PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    The GMT time snapshot taken at the beginning of the pass of predictions is stored with the Perf ADS Predicted Rout
» e
    information for use as the Predictions Reference GMT.
    PERF_SDD_3718 (PERF_SRD_8964_INT)

    The number of requested Predicted Route waypoints is 0 (Zero) and valid Predicted data resides in the Predicted Ro
» ute
    Buffer. Verify the Perf Predicted Route Buffer is invalidated and stored into the ADS Interface for IO's use.
    PERF_SDD_3887 (PERF_SRD_8976_INT)

    If all of the following conditions are met, the number of requested Intermediate Intent Waypoints shall be set to
» maximum
      number of intermediate intent points(10) and number of predicted Intermediate Intent Waypoints is set to zero:
      The current itinerary is Active Primary Flight Plan Predictions
      This is not the first pass of active primary flight plan predictions
      OPC ATS-enabled flag is true
      ADS ON is true
    PERF_SDD_07160_INT


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
```

```
            »    False
 2951  2960 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
            »    False
 2952  2961 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
            »    False
 2953  2962 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
            »    False
 2954  2963 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
            »    False
 2955  2964 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
            »     True
 2956  2965 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
            »     True
 2957  2966 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
            »     True
 2958  2967 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
            »     True
 2959  2968 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
            »     True
 2960  2969 Perf_Dpkg.Min_Gwt
            »    100.0
 2961  2970 Perf_Dpkg.Max_Gwt
            »    400.0
 2962  2971 Perf_Background_Dpkg.Pcactorsec                                                            S
            » econdary
 2963  2972 Perf_Background_Dpkg.Psignorehm
            »     True
 2964  2973 Perf_Background_Dpkg.Flight_Plan_Type                                               Copy_Fro
            » m_Active
 2965  2974 Perf_Background_Dpkg.Pcfltphase
            » Approach
 2966  2975 Perf_Background_Dpkg.Ats_Enable
            »     True
 2967  2976 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
            »   Cruise
 2968  2977 Perf_Background_Dpkg.Psacalt
            »  10000.0
 2969  2978 Perf_Database_Dpkg.Psmmo
            »     0.45
 2970  2979 Perf_Background_Dpkg.Pszfw
            »    300.0
 2971  2980 Perf_Background_Dpkg.Psblockfuel
            »     50.0
 2972  2981 Perf_Background_Dpkg.Pstaxifuel
```

```
            »     25.0
 2973  2982 Perf_Background_Dpkg.Psairborne
            »     True
 2974  2983 Perf_Background_Dpkg.Psautolat
            »    False
 2975  2984 Guid_Ext_Dpkg.Gcxxlatautoc
            »     True
 2976  2985 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
            »    False
 2977  2986 Perf_Background_Dpkg.Psengout
            »     True
 2978  2987 Cdk_Vert_Dpkg:Body.Engine_Out_I
            »     True
 2979  2988 Perf_Background_Dpkg.Pcholdflags.Hmdecel
            »     True
 2980  2989 Perf_Dpkg.Repredict_Hm_Decel
            »     True
 2981  2990 Perf_Background_DPkg.Pshmdecel
            »     True
 2982  2991 Perf_Background_Dpkg.Pcholdflags.Hmactive
            »     True
 2983  2992 Perf_Ads_Dpkg.Fi_Enabled
            »    false
 2984  2993 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
            »    False
 2985  2994 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
            »     True
 2986  2995 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
            »     True
 2987  2996 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
            »     True
 2988  2997 Perf_Background_Dpkg.Pcholdflags.Hmdistval
            »     True
 2989  2998 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
            »     True
 2990  2999 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
            »     True
 2991  3000 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
            »     True
 2992  3001 Perf_Background_Dpkg.Psappspdlat
            »     True
 2993  3002 Perf_Dpkg.Pcengoutprds
            »   Altpln
 2994  3003 Perf_Background_Dpkg.Pcpathref
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
             »   Onpath
 2995   3004 Guid_Ext_Dpkg.Va3Vertmde                                                                 Perf_Ext_Tpk
             » g.Vmnone
 2996   3005 Perf_Background_DPkg.Pscurcas
             »      5.0
 2997   3006 Perf_Background_DPkg.Pscurmach
             »      5.0
 2998   3007 Perf_Background_DPkg.Pscurtas
             »      5.0
 2999   3008 Perf_Background_Dpkg.Pcitin.Itinerary                                                         Prim_Fp
             » ln_Preds
 3000   3009 Perf_Background_Dpkg.Psenginesoff
             »     True
 3001   3010 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 3002   3011 Perf_Background_Dpkg.Pstogwtval
             »    False
 3003   3012 Perf_Background_Dpkg.Pstogwt
             »     50.0
 3004   3013 Perf_Background_Dpkg.Pcgwind
             »  Invalid
 3005   3014 Perf_Background_Dpkg.Psgw
             »      0.0
 3006   3015 Perf_Dpkg.Gross_Weight.Status
             »    Valid
 3007   3016 Perf_Dpkg.Gross_Weight.Data
             »    150.0
 3008   3017 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 3009   3018 Perf_Background_Dpkg.Pcacconfig
             »        5
 3010   3019 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »    False
 3011   3020 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
 3012   3021 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    400.0
 3013   3022 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »    False
 3014   3023 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 3015   3024 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 3016   3025 Perf_Background_Dpkg.Psstpclbact
```

```
                »     True
 3017   3026    Perf_Background_Dpkg.Psstpdesact
                »     True
 3018   3027    Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
                »      0.0
 3019   3028    Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
                »      0.0
 3020   3029    Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
                »     0.65
 3021   3030    Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
                »    345.0
 3022   3031    Perf_Background_Dpkg.Pccuraltcstr.Valid
                »     True
 3023   3032    Perf_Background_Dpkg.Pcprebcalt.Valid
                »     True
 3024   3033    Perf_Background_Dpkg.Pcgmttime.Hour
                »        1
 3025   3034    Perf_Background_Dpkg.Pcgmttime.Minute
                »        1
 3026   3035    Perf_Background_Dpkg.Pcgmttime.Second
                »        1
 3027   3036    Perf_Background_Dpkg.Psinertvs
                »      5.0
 3028   3037    Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
                »        0
 3029   3038    Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
                »        2
 3030   3039    Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
                »        0
 3031   3040    Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
                »        2
 3032   3041    Perf_Ads_Dpkg.Pr_Enabled
                »    False
 3033   3042    ATC_DISCRETES_PKG:body.Adson_Flag
                »     True
 3034   3043    Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid
                »     True
 3035   3044    Perf_Background_Dpkg.Pcitin.Flight_Plan
                »   Active
 3036   3045    Perf_Ads_Dpkg.Ii_Enabled
                »    False
 3037   3046    CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
                »     true
 3038   3047    CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
```

```
            »     true
3039  3048  ^Noise_End_Alt_Status                                                                                 Takeoff_Alt_Type
            » s.Active
3040  3049  CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints
            »      (0)
3041  3050  Perf_Dpkg.takeoff_gwt.valid
            »     True
3042  3051  Perf_Dpkg.takeoff_gwt.data
            »    400.0
3043  3052
3044  3053
3045  3054  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
3046  3055  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
3047  3056  Perf_Background_Dpkg.Pcholdflags.Hmactive                                     False          (N/A)
            »    FALSE  P
3048  3057  Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                    False          (N/A)
            »    FALSE  P
3049  3058  Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                    False          (N/A)
            »    FALSE  P
3050  3059  Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                    False          (N/A)
            »    FALSE  P
3051  3060  Perf_Background_Dpkg.Pcholdflags.Hmdistval                                    False          (N/A)
            »    FALSE  P
3052  3061  Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                      False          (N/A)
            »    FALSE  P
3053  3062  Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                     False          (N/A)
            »    FALSE  P
3054  3063  Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                                    False          (N/A)
            »    FALSE  P
3055  3064  Perf_Background_DPkg.Pshmdecel                                                False          (N/A)
            »    FALSE  P
3056  3065  Perf_Background_Dpkg.Psappspdlat                                              False          (N/A)
            »    FALSE  P
3057  3066  Perf_Background_Dpkg.Psignorehm                                                 True          (N/A)
            »     TRUE  P
3058  3067  CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec                True          (N/A)
            »     TRUE  P
3059  3068  Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints                        0          (N/A)
            »        0  P
3060  3069  Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints                        0          (N/A)
            »        0  P
3061  3070  Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points                          10          (N/A)
```

```
                »       10  P
 3062   3071 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points                                 0          (N/A)
                »        0  P
 3063   3072 Perf_Ads_Dpkg.Ii_Enabled                                                            False          (N/A)
                »    FALSE  P
 3064   3073 Perf_Ads_Dpkg.Pr_Enabled                                                            False          (N/A)
                »    FALSE  P
 3065   3074 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                        True          (N/A)
                »     TRUE  P
 3066   3075 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                             True          (N/A)
                »     TRUE  P
 3067   3076 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                               True          (N/A)
                »     TRUE  P
 3068   3077 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                              True          (N/A)
                »     TRUE  P
 3069   3078
 3070   3079
 3071   3080 ====> All 22 Comparisons Passed <====
 3072   3081
 3073   3082
 3074   3083 TESTID: 14
 3075   3084
 3076   3085     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
 3077   3086     working flight plan.
 3078   3087     PERF_SDD_4328 (PERF_SRD_10166_INT)
 3079   3088
 3080   3089
 3081   3090 INPUT                                                                                                      VALUE
 3082   3091 ---------------------------------------------------------------------------------------------------  ------------------
                » --------
 3083   3092 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
                »    False
 3084   3093 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
                »    False
 3085   3094 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
                »    False
 3086   3095 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
                »    False
 3087   3096 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
                »    False
 3088   3097 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
                »     True
 3089   3098 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
                »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
3090  3099 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
3091  3100 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
3092  3101 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
3093  3102 Perf_Dpkg.Min_Gwt
           »    100.0
3094  3103 Perf_Dpkg.Max_Gwt
           »    400.0
3095  3104 Perf_Background_Dpkg.Flight_Plan_Type                                                                I
           » s_Active
3096  3105 Perf_Background_Dpkg.Psignorehm
           »     True
3097  3106 Perf_Background_Dpkg.Ats_Enable
           »     True
3098  3107 Perf_Background_Dpkg.Psautolat
           »    False
3099  3108 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
3100  3109 Perf_Background_Dpkg.Psengout
           »     True
3101  3110 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
3102  3111 Perf_Background_DPkg.Pscurcas
           »      5.0
3103  3112 Perf_Background_DPkg.Pscurmach
           »      5.0
3104  3113 Perf_Background_DPkg.Pscurtas
           »      5.0
3105  3114 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     True
3106  3115 Perf_Background_Dpkg.Pstogwtval
           »    False
3107  3116 Perf_Background_Dpkg.Pstogwt
           »     50.0
3108  3117 Perf_Background_Dpkg.Pcgwind
           »  Invalid
3109  3118 Perf_Background_Dpkg.Psgw
           »      0.0
3110  3119 Perf_Dpkg.Gross_Weight.Status
           »    Valid
3111  3120 Perf_Dpkg.Gross_Weight.Data
           »    150.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
3112   3121 Perf_Integration_DPkg.Pcairbrakes
            »   Fullab
3113   3122 Perf_Background_Dpkg.Pcacconfig
            »        5
3114   3123 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
            »    False
3115   3124 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
            »   9000.0
3116   3125 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
            »    265.0
3117   3126 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
            »     0.55
3118   3127 Perf_Background_Dpkg.Psstpclbact
            »     True
3119   3128 Perf_Background_Dpkg.Psstpdesact
            »     True
3120   3129 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
            »      0.0
3121   3130 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
            »      0.0
3122   3131 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
            »     0.65
3123   3132 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
            »    345.0
3124   3133 Perf_Background_Dpkg.Pccuraltcstr.Valid
            »     True
3125   3134 Perf_Background_Dpkg.Pcprebcalt.Valid
            »     True
3126   3135 Perf_Background_Dpkg.Pcgmttime.Hour
            »        1
3127   3136 Perf_Background_Dpkg.Pcgmttime.Minute
            »        1
3128   3137 Perf_Background_Dpkg.Pcgmttime.Second
            »        1
3129   3138 Perf_Background_Dpkg.Psinertvs
            »      5.0
3130   3139 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
            »        0
3131   3140 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
            »        2
3132   3141 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
            »        0
3133   3142 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
            »        2
```

```
3134  3143 Perf_Ads_Dpkg.Pr_Enabled
           »    False
3135  3144 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »     true
3136  3145 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »     true
3137  3146 ^Noise_End_Alt_Status                                                                                 Takeoff_Alt_Type
           » s.Active
3138  3147 Perf_Dpkg.takeoff_gwt.valid
           »     True
3139  3148 Perf_Dpkg.takeoff_gwt.data
           »    400.0
3140  3149
3141  3150
3142  3151 OUTPUT                                                     EXPECTED              TOLERANCE              ACTUAL
           »          P/F
3143  3152 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
3144  3153 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                           False          (N/A)
           »    FALSE  P
3145  3154 Perf_Background_Dpkg.Noise_Data.Speed.Valid                              False          (N/A)
           »    FALSE  P
3146  3155 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                  True          (N/A)
           »     TRUE  P
3147  3156 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                    True          (N/A)
           »     TRUE  P
3148  3157 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                   True          (N/A)
           »     TRUE  P
3149  3158
3150  3159
3151  3160 ====> All 5 Comparisons Passed <====
3152  3161
3153  3162
3154  3163 TESTID: 15
3155  3164
3156  3165     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
3157  3166     working flight plan.
3158  3167     PERF_SDD_4328 (PERF_SRD_10166_INT)
3159  3168
3160  3169
3161  3170 INPUT                                                                                                         VALUE
3162  3171 -----------------------------------------------------------------------------------------------------  ------------------
           » --------
3163  3172 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
```

```
                  »    False
 3164     3173    CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
                  »    False
 3165     3174    CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
                  »    False
 3166     3175    CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
                  »    False
 3167     3176    CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
                  »    False
 3168     3177    CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
                  »     True
 3169     3178    CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
                  »     True
 3170     3179    CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
                  »     True
 3171     3180    CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
                  »     True
 3172     3181    CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
                  »     True
 3173     3182    Perf_Dpkg.Min_Gwt
                  »    100.0
 3174     3183    Perf_Dpkg.Max_Gwt
                  »    400.0
 3175     3184    Perf_Background_Dpkg.Flight_Plan_Type                                                                       I
                  » s_Active
 3176     3185    Perf_Background_Dpkg.Psignorehm
                  »     True
 3177     3186    Perf_Background_Dpkg.Ats_Enable
                  »     True
 3178     3187    Perf_Background_Dpkg.Psautolat
                  »    False
 3179     3188    Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
                  »    False
 3180     3189    Perf_Background_Dpkg.Psengout
                  »     True
 3181     3190    Cdk_Vert_Dpkg:Body.Engine_Out_I
                  »     True
 3182     3191    Perf_Background_DPkg.Pscurcas
                  »      5.0
 3183     3192    Perf_Background_DPkg.Pscurmach
                  »      5.0
 3184     3193    Perf_Background_DPkg.Pscurtas
                  »      5.0
 3185     3194    Perf_Despath_Dpkg.Pcdespath.Vgavalid
```

```
                »     True
  3186    3195  Perf_Background_Dpkg.Pstogwtval
                »    False
  3187    3196  Perf_Background_Dpkg.Pstogwt
                »     50.0
  3188    3197  Perf_Background_Dpkg.Pcgwind
                »  Invalid
  3189    3198  Perf_Background_Dpkg.Psgw
                »      0.0
  3190    3199  Perf_Dpkg.Gross_Weight.Status
                »    Valid
  3191    3200  Perf_Dpkg.Gross_Weight.Data
                »    150.0
  3192    3201  Perf_Integration_DPkg.Pcairbrakes
                »   Fullab
  3193    3202  Perf_Background_Dpkg.Pcacconfig
                »        5
  3194    3203  Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
                »    False
  3195    3204  Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
                »   9000.0
  3196    3205  Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
                »    265.0
  3197    3206  Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
                »     0.55
  3198    3207  Perf_Background_Dpkg.Psstpclbact
                »     True
  3199    3208  Perf_Background_Dpkg.Psstpdesact
                »     True
  3200    3209  Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
                »      0.0
  3201    3210  Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
                »      0.0
  3202    3211  Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
                »     0.65
  3203    3212  Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
                »    345.0
  3204    3213  Perf_Background_Dpkg.Pccuraltcstr.Valid
                »     True
  3205    3214  Perf_Background_Dpkg.Pcprebcalt.Valid
                »     True
  3206    3215  Perf_Background_Dpkg.Pcgmttime.Hour
                »        1
  3207    3216  Perf_Background_Dpkg.Pcgmttime.Minute
```

```
            »        1
3208  3217  Perf_Background_Dpkg.Pcgmttime.Second
            »        1
3209  3218  Perf_Background_Dpkg.Psinertvs
            »      5.0
3210  3219  Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
            »        0
3211  3220  Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
            »        2
3212  3221  Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
            »        0
3213  3222  Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
            »        2
3214  3223  Perf_Ads_Dpkg.Pr_Enabled
            »    False
3215  3224  CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
            »     true
3216  3225  CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
            »     true
3217  3226  ^Noise_End_Alt_Status                                                                 Takeoff_Alt_Type
            » s.Active
3218  3227  Perf_Dpkg.takeoff_gwt.valid
            »     True
3219  3228  Perf_Dpkg.takeoff_gwt.data
            »    400.0
3220  3229
3221  3230
3222  3231  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
3223  3232  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
3224  3233  Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                False          (N/A)
            »    FALSE  P
3225  3234  Perf_Background_Dpkg.Noise_Data.Speed.Valid                                   False          (N/A)
            »    FALSE  P
3226  3235  Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                       True          (N/A)
            »     TRUE  P
3227  3236  Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                         True          (N/A)
            »     TRUE  P
3228  3237  Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                        True          (N/A)
            »     TRUE  P
3229  3238
3230  3239
3231  3240  ====> All 5 Comparisons Passed <====


TESTID: 16

    If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
   - Perf hold flag record (Pcholdflags) is copied from guidance
   - Descent limit latch record (Pcdeslimlat) is copied from guidance.
   - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
» h.
   - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
»  considers
     the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
   - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
»  HM if no
     deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
» lear the HM
     leg deleted while in decel to HM flag (Pshmdeleted).
   - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
» d, and the
     HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
» t is within
     the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
   - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
» l to HM,
     then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false.
     PERF_SDD_4794_INT

    If Guidance considers the aircraft to be in a HA/HF deceleration, then flag indicating that the aircraft is within
    the HA/HF decel zone is set to true. Otherwise, it is set to false.
    PERF_SDD_4778_INT

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is th
» e first pass
    of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
    PERF_SDD_08225_INT
    --In this test case, it is manual speed mode and flight phase is Approach but this is not the first pass

    In this case, the working flight plan is Active,we set the corresponding condition and verify:
    (1)Perf hold flag record (Pcholdflags) is copied from guidance
    (2)Descent limit latch record (Pcdeslimlat) is copied from guidance
    (3)Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true
    (4)the re-evaluation indication flag is cleared (Repredict_Hm_Decel) (F,T)
    (5)clear the HM leg deleted while in decel to HM flag (Pshmdeleted)  (F,F,T)
    (6)flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
» e (F,F,F)
    (7)flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to false (F, F)
    (8)Flag indicating that the aircraft is within the HA/HF decel zone (Pshxpxdecel) is set to false.

REQUIREMENTS UNDER EVALUATION :PERF_SDD_4794_INT,PERF_SDD_4778_INT,PERF_SDD_4328 (PERF_SRD_10166_INT),PERF_SDD_08225_I
» NT


INPUT                                                                                                           VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Dpkg.takeoff_gwt.valid
»     True
Perf_Dpkg.takeoff_gwt.data
»    400.0
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
»    False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
»     True
Perf_Dpkg.Min_Gwt
»    100.0
Perf_Dpkg.Max_Gwt
»    400.0
Perf_Background_Dpkg.Pcactorsec
```

```
             »   Active
 3295   3304 Perf_Background_Dpkg.Flight_Plan_Type                                                                   I
             » s_Active
 3296   3305 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
             » Approach
 3297   3306 Perf_Background_Dpkg.Psignorehm
             »     True
 3298   3307 Perf_Background_Dpkg.Ats_Enable
             »     True
 3299   3308 Perf_Background_Dpkg.Psautolat
             »    False
 3300   3309 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
             »    False
 3301   3310 Perf_Background_Dpkg.Psengout
             »     True
 3302   3311 Cdk_Vert_Dpkg:Body.Engine_Out_I
             »     True
 3303   3312 Perf_Dpkg.Repredict_Hm_Decel
             »     True
 3304   3313 Perf_Background_DPkg.Pscurcas
             »      5.0
 3305   3314 Perf_Background_DPkg.Pscurmach
             »      5.0
 3306   3315 Perf_Background_DPkg.Pscurtas
             »      5.0
 3307   3316 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 3308   3317 Perf_Background_Dpkg.Pstogwtval
             »    False
 3309   3318 Perf_Background_Dpkg.Pstogwt
             »     50.0
 3310   3319 Perf_Background_Dpkg.Pcgwind
             »  Invalid
 3311   3320 Perf_Background_Dpkg.Psgw
             »      0.0
 3312   3321 Perf_Dpkg.Gross_Weight.Status
             »    Valid
 3313   3322 Perf_Dpkg.Gross_Weight.Data
             »    150.0
 3314   3323 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 3315   3324 Perf_Background_Dpkg.Pcacconfig
             »        5
 3316   3325 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
```

```
                »    False
 3317   3326 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
                »   9000.0
 3318   3327 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
                »    265.0
 3319   3328 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
                »     0.55
 3320   3329 Perf_Background_Dpkg.Psstpclbact
                »     True
 3321   3330 Perf_Background_Dpkg.Psstpdesact
                »     True
 3322   3331 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
                »      0.0
 3323   3332 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
                »      0.0
 3324   3333 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
                »     0.65
 3325   3334 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
                »    345.0
 3326   3335 Perf_Background_Dpkg.Pccuraltcstr.Valid
                »     True
 3327   3336 Perf_Background_Dpkg.Pcprebcalt.Valid
                »     True
 3328   3337 Perf_Background_Dpkg.Pcgmttime.Hour
                »        1
 3329   3338 Perf_Background_Dpkg.Pcgmttime.Minute
                »        1
 3330   3339 Perf_Background_Dpkg.Pcgmttime.Second
                »        1
 3331   3340 Perf_Background_Dpkg.Psinertvs
                »      5.0
 3332   3341 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
                »        0
 3333   3342 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
                »        2
 3334   3343 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
                »        0
 3335   3344 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
                »        2
 3336   3345 Perf_Ads_Dpkg.Pr_Enabled
                »    False
 3337   3346 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
                »     true
 3338   3347 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
```

```
             »     true
3339   3348  ^Noise_End_Alt_Status                                                                                    Takeoff_Alt_Types.
             » Inactive
3340   3349  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
             »     True
3341   3350  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel
             »    False
3342   3351  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn
             »    False
3343   3352  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel
             »    False
3344   3353  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv
             »    False
3345   3354  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval
             »    False
3346   3355  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm
             »    false
3347   3356  Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
             »     True
3348   3357  Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
             »     True
3349   3358  Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel
             »     True
3350   3359  Perf_Dpkg.Pshmdeleted
             »     True
3351   3360  Perf_Dpkg.Pcfirstpred(Active)
             »    false
3352   3361  Guid_Ext_Dpkg.Va3vertmde                                                                                        Perf_Ext_Tp
             » kg.Vmspd
3353   3362  CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
             »     true
3354   3363  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
             »     True
3355   3364  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
             »     true
3356   3365  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
             »     True
3357   3366  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
             »     True
3358   3367  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
             »    50010
3359   3368  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
             »     true
3360   3369  CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt
```

```
            »  25001.1
3361  3370 Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt
            »  25001.0
3362  3371 Perf_Background_Dpkg.Pcholdflags.Hmactive
            »    False
3363  3372 Perf_Background_Dpkg.Pcholdflags.Hmdecel
            »     True
3364  3373 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
            »     True
3365  3374 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
            »     True
3366  3375 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
            »     True
3367  3376 Perf_Background_Dpkg.Pcholdflags.Hmdistval
            »     True
3368  3377 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
            »    False
3369  3378 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
            »    False
3370  3379 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
            »    False
3371  3380 Perf_Dpkg.Pshmdeleted
            »     True
3372  3381 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
            »     True
3373  3382 Perf_Background_Dpkg.Psappspdlat
            »    False
3374  3383 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
            »     True
3375  3384 Perf_Background_Dpkg.Noise_Data.Speed.Valid
            »     True
3376  3385 Perf_Background_Dpkg.Pshmdecel
            »     True
3377  3386 Perf_Background_Dpkg.Psconsider_Hm
            »     True
3378  3387 Perf_Background_Dpkg.Pshxpxdecel
            »     True
3379  3388 Perf_Background_Dpkg.Pcspeedmode                                                                    Perf_Ext_Tpk
            » g.Vmecon
3380  3389
3381  3390
3382  3391 OUTPUT                                                       EXPECTED                TOLERANCE            ACTUAL
            »           P/F
3383  3392 ----------------------------------------------------  -----------------------------  ------------  -----------------
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
            » --------  ----
 3384  3393 Perf_Dpkg.Repredict_Hm_Decel                                    False          (N/A)
            »    FALSE  P
 3385  3394 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                         True          (N/A)
            »     TRUE  P
 3386  3395 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                           True          (N/A)
            »     TRUE  P
 3387  3396 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                          True          (N/A)
            »     TRUE  P
 3388  3397 Perf_Background_Dpkg.Pcholdflags.Hmactive                        True          (N/A)
            »     TRUE  P
 3389  3398 Perf_Background_Dpkg.Pcholdflags.Hmdecel                        False          (N/A)
            »    FALSE  P
 3390  3399 Perf_Background_Dpkg.Pcholdflags.Manhmwarn                      False          (N/A)
            »    FALSE  P
 3391  3400 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                      False          (N/A)
            »    FALSE  P
 3392  3401 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                      False          (N/A)
            »    FALSE  P
 3393  3402 Perf_Background_Dpkg.Pcholdflags.Hmdistval                      False          (N/A)
            »    FALSE  P
 3394  3403 Perf_Background_Dpkg.Pcholdflags.Consider_Hm                    False          (N/A)
            »    FALSE  P
 3395  3404 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                         True          (N/A)
            »     TRUE  P
 3396  3405 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                        True          (N/A)
            »     TRUE  P
 3397  3406 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                       True          (N/A)
            »     TRUE  P
 3398  3407 Perf_Dpkg.Pshmdeleted                                           False          (N/A)
            »    FALSE  P
 3399  3408 Perf_Background_Dpkg.Pshmdecel                                  false          (N/A)
            »    FALSE  P
 3400  3409 Perf_Background_Dpkg.Psappspdlat                                 True          (N/A)
            »     TRUE  P
 3401  3410 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                  False          (N/A)
            »    FALSE  P
 3402  3411 Perf_Background_Dpkg.Noise_Data.Speed.Valid                     False          (N/A)
            »    FALSE  P
 3403  3412 Perf_Background_Dpkg.Psconsider_Hm                              False          (N/A)
            »    FALSE  P
 3404  3413 Perf_Background_Dpkg.Pshxpxdecel                                False          (N/A)
            »    FALSE  P
 3405  3414 Perf_Background_Dpkg.Pcspeedmode                 /= Perf_Ext_Tpkg.Vmecon          (N/A)
```

```
»    VMSPD  P


====> All 22 Comparisons Passed <====


TESTID: 17

     If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
   - Perf hold flag record (Pcholdflags) is copied from guidance
   - Descent limit latch record (Pcdeslimlat) is copied from guidance.
   - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approach.
   - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer considers
     the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
   - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the HM if no
     deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then clear the HM
     leg deleted while in decel to HM flag (Pshmdeleted).
   - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicted, and the
     HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraft is within
     the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
   - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in decel to HM,
     then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
    PERF_SDD_4794_INT
    If Guidance considers the aircraft to be in a HA/HF deceleration, then flag indicating that the aircraft is within
    the HA/HF decel zone is set to true. Otherwise, it is set to false.
    PERF_SDD_4778_INT

    The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
    working flight plan.
    PERF_SDD_4328 (PERF_SRD_10166_INT)

    This test case Stores the noise data from the Active Flight Plan when the working flight plan is a Temporary flight plan
    as per the change in the Anchor. PERF_SDD_4327(PERF_SRD_12370_INT, PERF_SRD_12404, PERF_SRD_10166_INT)

    This test case verify:
    (1)Perf hold flag record (Pcholdflags) is copied from guidance
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
3441  3450     (2)Descent limit latch record (Pcdeslimlat) is copied from guidance
3442  3451     (3)Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false
3443  3452     (4)the re-evaluation indication flag is not cleared (Repredict_Hm_Decel not false) (T,T)
3444  3453     (5)HM leg deleted is not cleared while in decel to HM flag (Pshmdeleted)  (T,F,T)
3445  3454     (6)Flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to false (T, T)
3446  3455     (7)flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
            » e (F,T,T)
3447  3456     (8)Flag indicating that the aircraft is within the HA/HF decel zone (Pshxpxdecel) is set to True.
3448  3457
3449  3458 REQUIREMENTS UNDER EVALUATION : PERF_SDD_4794_INT, PERF_SDD_4778_INT,PERF_SDD_4328 (PERF_SRD_10166_INT)
3450  3459                                 PERF_SDD_4327(PERF_SRD_12370_INT, PERF_SRD_12404, PERF_SRD_10166_INT)
3451  3460
3452  3461
3453  3462 INPUT                                                                                                          VALUE
3454  3463 --------------------------------------------------------------------------------------------------  ------------------
            » --------
3455  3464 Perf_Dpkg.takeoff_gwt.valid
            »     True
3456  3465 Perf_Background_Dpkg.Pcactorsec                                                                                      T
            » emporary
3457  3466 Perf_Dpkg.takeoff_gwt.data
            »    400.0
3458  3467 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
            »    False
3459  3468 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
            »    False
3460  3469 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
            »    False
3461  3470 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
            »    False
3462  3471 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
            »    False
3463  3472 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
            »     True
3464  3473 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
            »     True
3465  3474 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
            »     True
3466  3475 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
            »     True
3467  3476 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
            »     True
3468  3477 Perf_Dpkg.Min_Gwt
            »    100.0
```

```
3469  3478 Perf_Dpkg.Max_Gwt
           »    400.0
3470  3479 Perf_Background_Dpkg.Flight_Plan_Type                                                                                    I
           » s_Active
3471  3480 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
           »  Descent
3472  3481 Perf_Background_Dpkg.Psignorehm
           »     True
3473  3482 Perf_Background_Dpkg.Ats_Enable
           »     True
3474  3483 Perf_Background_Dpkg.Psautolat
           »    False
3475  3484 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
3476  3485 Perf_Background_Dpkg.Psengout
           »     True
3477  3486 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
3478  3487 Perf_Background_DPkg.Pscurcas
           »      5.0
3479  3488 Perf_Background_DPkg.Pscurmach
           »      5.0
3480  3489 Perf_Background_DPkg.Pscurtas
           »      5.0
3481  3490 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     True
3482  3491 Perf_Background_Dpkg.Pstogwtval
           »    False
3483  3492 Perf_Background_Dpkg.Pstogwt
           »     50.0
3484  3493 Perf_Background_Dpkg.Pcgwind
           »  Invalid
3485  3494 Perf_Background_Dpkg.Psgw
           »      0.0
3486  3495 Perf_Dpkg.Gross_Weight.Status
           »    Valid
3487  3496 Perf_Dpkg.Gross_Weight.Data
           »    150.0
3488  3497 Perf_Integration_DPkg.Pcairbrakes
           »   Fullab
3489  3498 Perf_Background_Dpkg.Pcacconfig
           »        5
3490  3499 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
           »    False
```

```
3491  3500 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
3492  3501 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
3493  3502 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
3494  3503 Perf_Background_Dpkg.Psstpclbact
           »     True
3495  3504 Perf_Background_Dpkg.Psstpdesact
           »     True
3496  3505 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
3497  3506 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
3498  3507 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
3499  3508 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
3500  3509 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
3501  3510 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
3502  3511 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
3503  3512 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
3504  3513 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
3505  3514 Perf_Background_Dpkg.Psinertvs
           »      5.0
3506  3515 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
           »        0
3507  3516 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
           »        2
3508  3517 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
3509  3518 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
3510  3519 Perf_Ads_Dpkg.Pr_Enabled
           »    False
3511  3520 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »     true
3512  3521 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »     true
```

```
3513  3522 ^Noise_End_Alt_Status                                                                     Takeoff_Alt_Types.
           » Inactive
3514  3523 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
           »     true
3515  3524 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
           »     True
3516  3525 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
           »     true
3517  3526 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
           »     True
3518  3527 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
           »     True
3519  3528 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
           »    20000
3520  3529 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
           »     79.0
3521  3530 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
           »    100.0
3522  3531 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
           »      0.5
3523  3532 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas
           »     50.0
3524  3533 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
3525  3534 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel
           »     True
3526  3535 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn
           »    False
3527  3536 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel
           »     True
3528  3537 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv
           »    False
3529  3538 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval
           »    False
3530  3539 Guid_Checkpoint_Resynch_Dpkg.Va3holdflags.Consider_Hm
           »    False
3531  3540 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
           »    False
3532  3541 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
           »    False
3533  3542 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel
           »    False
3534  3543 Perf_Dpkg.Pshmdeleted
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
3535  3544 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
3536  3545 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »    False
3537  3546 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
3538  3547 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »    False
3539  3548 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
3540  3549 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
3541  3550 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
           »     True
3542  3551 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
3543  3552 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
3544  3553 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
3545  3554 Perf_Dpkg.Repredict_Hm_Decel
           »     True
3546  3555 Perf_Background_Dpkg.Psappspdlat
           »     True
3547  3556 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
           »     True
3548  3557 Perf_Background_Dpkg.Noise_Data.Speed.Valid
           »     True
3549  3558 Perf_Background_Dpkg.Pshmdecel
           »     True
3550  3559 Perf_Background_Dpkg.Psconsider_Hm
           »     True
3551  3560 Perf_Background_Dpkg.Pshxpxdecel
           »    False
3552  3561
3553  3562
3554  3563 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
           »           P/F
3555  3564 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
3556  3565 Noise_Abate_Data.NOISE_SPEED
3557  3566       FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).NOISE_SPEED          (N/A)                 0.0
           » 0000E+00  P
3558  3567 Noise_Abate_Data.Noise_Speed_Val
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 3559   3568   FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val          (N/A)
              »    FALSE  P
 3560   3569  Noise_Abate_Data.Noise_End_Alt
 3561   3570     FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt          (N/A)                 0.0
              » 0000E+00  P
 3562   3571  Noise_Abate_Data.Default_Noise_Spd
 3563   3572  FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Default_Noise_Spd          (N/A)                 0.0
              » 0000E+00  P
 3564   3573  Noise_Abate_Data.Default_Noise_Spd_Val
 3565   3574  FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Default_Noise_Spd_Val          (N/A)
              »        FALSE  P
 3566   3575  Noise_Abate_Data.Noise_Thrust
 3567   3576      FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Thrust          (N/A)
              »  DRTNONE  P
 3568   3577  Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                        True          (N/A)
              »     TRUE  P
 3569   3578  Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                          True          (N/A)
              »     TRUE  P
 3570   3579  Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                         True          (N/A)
              »     TRUE  P
 3571   3580  Perf_Background_Dpkg.Pcholdflags.Hmactive                                      False          (N/A)
              »    FALSE  P
 3572   3581  Perf_Background_Dpkg.Pcholdflags.Hmdecel                                        True          (N/A)
              »     TRUE  P
 3573   3582  Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                     False          (N/A)
              »    FALSE  P
 3574   3583  Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                      True          (N/A)
              »     TRUE  P
 3575   3584  Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                     False          (N/A)
              »    FALSE  P
 3576   3585  Perf_Background_Dpkg.Pcholdflags.Hmdistval                                     False          (N/A)
              »    FALSE  P
 3577   3586  Perf_Background_Dpkg.Pcholdflags.Consider_Hm                                   False          (N/A)
              »    FALSE  P
 3578   3587  Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                       False          (N/A)
              »    FALSE  P
 3579   3588  Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                      False          (N/A)
              »    FALSE  P
 3580   3589  Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                                     False          (N/A)
              »    FALSE  P
 3581   3590  Perf_Dpkg.Repredict_Hm_Decel                                                /= false          (N/A)
              »     TRUE  P
 3582   3591  Perf_Dpkg.Pshmdeleted                                                       /= false          (N/A)
              »     TRUE  P
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
3583  3592 Perf_Background_Dpkg.Pshmdecel                                                   False         (N/A)
           »    FALSE  P
3584  3593 Perf_Background_Dpkg.Psappspdlat                                                 False         (N/A)
           »    FALSE  P
3585  3594 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                   False         (N/A)
           »    FALSE  P
3586  3595 Perf_Background_Dpkg.Noise_Data.Speed.Valid                                      False         (N/A)
           »    FALSE  P
3587  3596 Perf_Background_Dpkg.Psconsider_Hm                                               False         (N/A)
           »    FALSE  P
3588  3597 Perf_Background_Dpkg.Pshxpxdecel                                                  True         (N/A)
           »     TRUE  P
3589  3598
3590  3599
3591  3600 ====> All 27 Comparisons Passed <====
3592  3601
3593  3602
3594  3603 TESTID: 18
3595  3604
3596  3605     The bleeds data: engine cowl, wing and air conditioning flags is copied from the IO_Engine_Data_Dpkg for the
3597  3606     working flight plan.
3598  3607     PERF_SDD_4328 (PERF_SRD_10166_INT)
3599  3608
3600  3609     The noise data:  altitude, speed and thrust shall be copied from FPLN inputs for the all working flight plans,
3601  3610     by calling Fpln_Ext_Dpkg.Get_Noise_Data except when the working flight plan is a Temporary.  When the working
3602  3611     flight plan is a Temporary flight plan, the noise data is copied from the Active flight plan.
3603  3612     Anchor PERF_SDD_4327 (PERF_SRD_10166_INT, PERF_SRD_12370_INT, PERF_SRD_12404)
3604  3613
3605  3614
3606  3615 INPUT                                                                                               VALUE
3607  3616 --------------------------------------------------------------------------------  ------------------
           » --------
3608  3617 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
           »    False
3609  3618 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
           »    False
3610  3619 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
           »    False
3611  3620 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
           »    False
3612  3621 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
           »    False
3613  3622 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
3614  3623 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »     True
3615  3624 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
3616  3625 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
3617  3626 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
3618  3627 Perf_Dpkg.Min_Gwt
           »    100.0
3619  3628 Perf_Dpkg.Max_Gwt
           »    400.0
3620  3629 Perf_Background_Dpkg.Flight_Plan_Type                                                                                      I
           » s_Active
3621  3630 Perf_Background_Dpkg.Psignorehm
           »     True
3622  3631 Perf_Background_Dpkg.Ats_Enable
           »     True
3623  3632 Perf_Background_Dpkg.Psautolat
           »    False
3624  3633 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
3625  3634 Perf_Background_Dpkg.Psengout
           »     True
3626  3635 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
3627  3636 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.hmdecel
           »     True
3628  3637 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
3629  3638 Perf_Dpkg.Repredict_Hm_Decel
           »    False
3630  3639 Perf_Background_DPkg.Pscurcas
           »      5.0
3631  3640 Perf_Background_DPkg.Pscurmach
           »      5.0
3632  3641 Perf_Background_DPkg.Pscurtas
           »      5.0
3633  3642 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     True
3634  3643 Perf_Background_Dpkg.Pstogwtval
           »    False
3635  3644 Perf_Background_Dpkg.Pstogwt
           »     50.0
```

```
3636  3645 Perf_Background_Dpkg.Pcgwind
           »  Invalid
3637  3646 Perf_Background_Dpkg.Psgw
           »      0.0
3638  3647 Perf_Dpkg.Gross_Weight.Status
           »    Valid
3639  3648 Perf_Dpkg.Gross_Weight.Data
           »    150.0
3640  3649 Perf_Integration_DPkg.Pcairbrakes
           »   Fullab
3641  3650 Perf_Background_Dpkg.Pcacconfig
           »        5
3642  3651 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
           »    False
3643  3652 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
3644  3653 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
3645  3654 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
3646  3655 Perf_Background_Dpkg.Psstpclbact
           »     True
3647  3656 Perf_Background_Dpkg.Psstpdesact
           »     True
3648  3657 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
3649  3658 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
3650  3659 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
3651  3660 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
3652  3661 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
3653  3662 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
3654  3663 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
3655  3664 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
3656  3665 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
3657  3666 Perf_Background_Dpkg.Psinertvs
           »      5.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
3658   3667 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
            »        0
3659   3668 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
            »        2
3660   3669 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
            »        0
3661   3670 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
            »        2
3662   3671 Perf_Ads_Dpkg.Pr_Enabled
            »    False
3663   3672 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
            »     true
3664   3673 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
            »     true
3665   3674 ^Noise_End_Alt_Status                                                                                       Takeoff_Alt_Types.
            » Inactive
3666   3675 Perf_Dpkg.takeoff_gwt.valid
            »     True
3667   3676 Perf_Background_Dpkg.Pcactorsec                                                                                              S
            » econdary
3668   3677 Perf_Dpkg.takeoff_gwt.data
            »    400.0
3669   3678
3670   3679
3671   3680 OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
            »           P/F
3672   3681 ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
3673   3682 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                False          (N/A)
            »    FALSE  P
3674   3683 Perf_Background_Dpkg.Noise_Data.Speed.Valid                                   False          (N/A)
            »    FALSE  P
3675   3684 Noise_Abate_Data.NOISE_SPEED
3676   3685    FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).NOISE_SPEED          (N/A)                  0.0
            » 0000E+00  P
3677   3686 Noise_Abate_Data.Noise_Speed_Val
3678   3687 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_Speed_Val          (N/A)
            »     FALSE  P
3679   3688 Noise_Abate_Data.Noise_End_Alt
3680   3689  FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt          (N/A)                  0.0
            » 0000E+00  P
3681   3690 Noise_Abate_Data.Default_Noise_Spd
3682   3691 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Default_Noise_Spd          (N/A)
            » 0.00000E+00  P
```

```
Noise_Abate_Data.Default_Noise_Spd_Val
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Default_Noise_Spd_Val          (N/A)
»           FALSE  P
Noise_Abate_Data.Noise_Thrust
  FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_Thrust          (N/A)
»  DRTNONE  P
Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                       True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                         True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                        True          (N/A)
»     TRUE  P


====> All 11 Comparisons Passed <====


TESTID: 19

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true
   the Noise_Thrust_Target from VGUIDE is valid.
   so, predicted noise thrust ramping data is initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to
   the Noise_Thrust_Target, and Perf_Background_Dpkg.Noise_Data.Ramping to true.

*If  1. the Flex_Takeoff_Temperature validity is true,
   *2. the aircraft is in Climb or below, ("Climb" in this testcase)
```

```
3722  3731    *3. the aircraft altitude is at or below thrust reduction altitude ("below" in this testcase) and
3723  3732     4. there is not an engine out condition
3724  3733  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
3725  3734      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
3726  3735       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
            » .
3727  3736        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
3728  3737           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
3729  3738       *Else
3730  3739           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
3731  3740  Otherwise the Flex_Isadev value will be set to zero.
3732  3741 PERF_SDD_5585(PERF_SRD_12437)
3733  3742
3734  3743
3735  3744 INPUT                                                                                                          VALUE
3736  3745 ----------------------------------------------------------------------------------------------------  ------------------
            » --------
3737  3746 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
            »    Climb
3738  3747 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
            »     True
3739  3748 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
            »     21.0
3740  3749 Perf_Background_Dpkg.Psorgalt
            »  36090.0
3741  3750 Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target                                                               (10.
            » 6, True)
3742  3751 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
            »     True
3743  3752 Perf_Background_Dpkg.Flex_Isadev.Data
            »      5.0
3744  3753 Perf_Background_Dpkg.Noise_Data.Tspd                                                                           (0.0
            » , False)
3745  3754 Perf_Background_Dpkg.Noise_Data.Ramping
            »    False
3746  3755 Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude
            »      156
3747  3756 Curacalt
            »    155.0
3748  3757 Engine_Out_I
            »    False
3749  3758
3750  3759
3751  3760 OUTPUT                                                                EXPECTED              TOLERANCE           ACTUAL
```

```
             »           P/F
 3752   3761 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 3753   3762 Perf_Background_Dpkg.Flex_Isadev.Data                                                  77.501508          0.001                 7.7
             » 5015E+01  P
 3754   3763 Perf_Background_Dpkg.Noise_Data.Tspd.Data                                                   10.6          0.001                 1.0
             » 6000E+01  P
 3755   3764 Perf_Background_Dpkg.Noise_Data.Tspd.Valid                                                  True          (N/A)
             »     TRUE  P
 3756   3765 Perf_Background_Dpkg.Noise_Data.Ramping                                                     True          (N/A)
             »     TRUE  P
 3757   3766
 3758   3767
 3759   3768 ====> All 4 Comparisons Passed <====
 3760   3769
 3761   3770
 3762   3771 TESTID: 20
 3763   3772
 3764   3773 *When any of the following conditions are satisfied
 3765   3774 (1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
 3766   3775     Noise_Thrust_Target from VGUIDE is valid.
 3767   3776 (2) If all the following conditions are satisfied
 3768   3777    -Navigation(Nav Filtered) A/C Altitude is Valid
 3769   3778    -Noise End altitude is valid
 3770   3779    -Noise_Thrust_Target from VGUIDE is valid
 3771   3780    -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
 3772   3781     current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
 3773   3782     altitude tolerance).
 3774   3783    Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
 3775   3784    initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
 3776   3785    and Perf_Background_Dpkg.Noise_Data.Ramping to true,
 3777   3786    Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
 3778   3787    PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
 3779   3788                   PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )
 3780   3789
 3781   3790    in this case,
 3782   3791    the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is not true
 3783   3792    Navigation(Nav Filtered) A/C Altitude is Valid
 3784   3793    Noise End altitude is valid
 3785   3794    the Noise_Thrust_Target from VGUIDE is valid.
 3786   3795    the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
 3787   3796    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
 3788   3797    so, predicted noise thrust ramping data is initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to
 3789   3798    the Noise_Thrust_Target, and Perf_Background_Dpkg.Noise_Data.Ramping to true.
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```

If *1. the Flex_Takeoff_Temperature validity is true,
    2. the aircraft is in Climb or below,
    3. the aircraft altitude is at or below thrust reduction altitude and
    4. there is not an engine out condition
  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
» .
        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
        Else
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
 *Otherwise the Flex_Isadev value will be set to zero.
PERF_SDD_5585(PERF_SRD_12437)


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcactorsec
»   Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»    Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
»    False
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
»     21.0
Perf_Background_Dpkg.Psorgalt
»  36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target                                                                  (10.
» 6, True)
Navigation_Data.Aircraft_Altitude_Valid
»     True
Navigation_Data.Aircraft_Altitude
»    53.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status                Takeoff_Alt_Type
» s.Active
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val
»    False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
»     90.0
Perf_Background_Dpkg.Psengout
»    False
```

```
Perf_Background_Dpkg.Flex_Isadev.Data
»      5.0
Perf_Background_Dpkg.Noise_Data.Tspd                                                                              (0.0
» , False)
Perf_Background_Dpkg.Noise_Data.Ramping
»    False
Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude
»      156
Curacalt
»    155.0


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Flex_Isadev.Data                                           0.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Noise_Data.Tspd.Data                                      10.6          0.001                 1.0
» 6000E+01  P
Perf_Background_Dpkg.Noise_Data.Tspd.Valid                                     True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Noise_Data.Ramping                                        True          (N/A)
»     TRUE  P


====> All 4 Comparisons Passed <====


TESTID: 21

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ftaltitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is  true
   Navigation(Nav Filtered) A/C Altitude is Valid
   Noise End altitude is valid
   the Noise_Thrust_Target from VGUIDE is invalid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.

If  1. the Flex_Takeoff_Temperature validity is true,
   *2. the aircraft is in Climb or below,
    3. the aircraft altitude is at or below thrust reduction altitude and
    4. there is not an engine out condition
  then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
      Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
» .
        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
        Else
           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
 *Otherwise the Flex_Isadev value will be set to zero.
PERF_SDD_5585(PERF_SRD_12437)


INPUT                                                                                                         VALUE
------------------------------------------------------------------------------------------------------------  -----------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»   Cruise
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
»     True
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
»     21.0
Perf_Background_Dpkg.Psorgalt
»  36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target                                                                 (10.
» 6, True)
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
»     True
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid
```

```
            »    False
3889  3898  Navigation_Data.Aircraft_Altitude_Valid
            »     True
3890  3899  Navigation_Data.Aircraft_Altitude
            »    53.20
3891  3900  Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status                Takeoff_Alt_Type
            » s.Active
3892  3901  Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val
            »    False
3893  3902  Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
            »     90.0
3894  3903  Perf_Background_Dpkg.Psengout
            »    False
3895  3904  Perf_Background_Dpkg.Flex_Isadev.Data
            »      5.0
3896  3905  Perf_Background_Dpkg.Noise_Data.Ramping
            »     True
3897  3906  Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude
            »      156
3898  3907  Curacalt
            »    155.0
3899  3908
3900  3909
3901  3910  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
3902  3911  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
3903  3912  Perf_Background_Dpkg.Flex_Isadev.Data                                           0.0          0.001                 0.0
            » 0000E+00  P
3904  3913  Perf_Background_Dpkg.Noise_Data.Ramping                                       False          (N/A)
            »    FALSE  P
3905  3914
3906  3915
3907  3916  ====> All 2 Comparisons Passed <====
3908  3917
3909  3918
3910  3919  TESTID: 22
3911  3920
3912  3921  If  1. the Flex_Takeoff_Temperature validity is true,
3913  3922      2. the aircraft is in Climb or below,
3914  3923     *3. the aircraft altitude is at or below thrust reduction altitude and
3915  3924      4. there is not an engine out condition
3916  3925    then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
3917  3926        Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
```

```
3918   3927       where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
            » .
3919   3928        If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
3920   3929           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
3921   3930        Else
3922   3931           Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
3923   3932  *Otherwise the Flex_Isadev value will be set to zero.
3924   3933 PERF_SDD_5585(PERF_SRD_12437)
3925   3934
3926   3935 If Noise End Altitude status is active i.e., A/C is below entered Noise End Altitude or if the A/C is currently in Noi
            » se Ramp
3927   3936 segment and no engine out condition exist then the following noise data shall be set up for background's usage:
3928   3937 PERF_SDD_5607_INT
3929   3938
3930   3939 The validity of Perf_Background_Dpkg.Noise_Data.Altitude shall be set to valid and its value is set to Noise_End_Alt o
            » btained
3931   3940 from FPLN.
3932   3941 PERF_SDD_5608_INT
3933   3942
3934   3943 If Noise Speed (Noise_Speed_Val) from FPLN is valid then the validity of Perf_Background_Dpkg.Noise_Data.Speed shall b
            » e set to
3935   3944 valid and its value is set to Noise_Speed obtained from FPLN, otherwise its validity is set to invalid.
3936   3945 PERF_SDD_5610_INT (Here Noise Speed (Noise_Speed_Val) from FPLN is invalid)
3937   3946
3938   3947 If Noise TSPD from FPLN  is valid than the validity of Perf_Background_Dpkg.Noise_Data.TSPD shall be set to valid and
            » its
3939   3948 value is set to Noise_TSPD obtained from FPLN, otherwise its validity is set to Invalid.
3940   3949 PERF_SDD_5611_INT (Here Noise TSPD from FPLN is invalid.)
3941   3950
3942   3951 When flight phase is prior to descent phase with manual speed mode, then the speed validity shall be set as follows
3943   3952        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
3944   3953        If CAS is selected on FCU and A/C is above crossover altitude then Valid flag for MACH speed is set to False.
3945   3954 This TC checks for negative conditions when CAS is selected, but A/C is not above crossover altitude.
3946   3955 PERF_SDD_07544_INT
3947   3956
3948   3957
3949   3958 INPUT                                                                                                         VALUE
3950   3959 ----------------------------------------------------------------------------------------------------  ------------------
            » --------
3951   3960 ^Noise_End_Alt_Status                                                                                Takeoff_Alt_Type
            » s.Active
3952   3961 ^Noise_Speed_Val
            »    False
3953   3962 ^Noise_TSPD.valid
```

```
                »    False
 3954   3963 ^Noise_End_Alt
             »    300.0
 3955   3964 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
             »     True
 3956   3965 Cdk_Vert_Dpkg:Body.Engine_Out_I
             »    False
 3957   3966 Perf_Background_Dpkg.Pcactorsec
             »   Active
 3958   3967 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
             »    False
 3959   3968 Perf_Background_Dpkg.Noise_Data.Altitude.Data
             »      0.0
 3960   3969 Perf_Background_Dpkg.Noise_Data.Speed.Valid
             »     True
 3961   3970 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
             »     True
 3962   3971 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »    Climb
 3963   3972 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
             »     True
 3964   3973 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
             »     21.0
 3965   3974 Perf_Background_Dpkg.Psorgalt
             »  36090.0
 3966   3975 Perf_Background_Dpkg.Flex_Isadev.Data
             »      5.0
 3967   3976 Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude
             »      156
 3968   3977 Curacalt
             »    156.5
 3969   3978 Perf_Background_Dpkg.Pcspeedmode                                                                          Perf_Ext_Tp
             » kg.Vmspd
 3970   3979 Perf_Background_Dpkg.Pcmanspd.Machvalid
             »     True
 3971   3980 Perf_Background_Dpkg.Psacalt
             »  10000.0
 3972   3981 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt
             »  20000.0
 3973   3982 Machmode
             »    False
 3974   3983
 3975   3984
 3976   3985 OUTPUT                                                        EXPECTED               TOLERANCE             ACTUAL
```

```
             »           P/F
 3977   3986 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 3978   3987 Perf_Background_Dpkg.Noise_Data.Tspd.Valid                                    False          (N/A)
             »    FALSE  P
 3979   3988 Perf_Background_Dpkg.Flex_Isadev.Data                                           0.0          0.001                  0.0
             » 0000E+00  P
 3980   3989 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                                 True          (N/A)
             »     TRUE  P
 3981   3990 Perf_Background_Dpkg.Noise_Data.Altitude.Data                                 300.0          0.001                  3.0
             » 0000E+02  P
 3982   3991 Perf_Background_Dpkg.Noise_Data.Speed.Valid                                   False          (N/A)
             »    FALSE  P
 3983   3992 Perf_Background_Dpkg.Noise_Data.Tspd.Valid                                    False          (N/A)
             »    FALSE  P
 3984   3993 Perf_Background_Dpkg.Pcmanspd.Machvalid                                        True          (N/A)
             »     TRUE  P
 3985   3994
 3986   3995
 3987   3996 ====> All 7 Comparisons Passed <====
 3988   3997
 3989   3998
 3990   3999 TESTID: 23
 3991   4000
 3992   4001 If  1. the Flex_Takeoff_Temperature validity is true,
 3993   4002     2. the aircraft is in Climb or below,
 3994   4003    *3. the aircraft altitude is at or below thrust reduction altitude and
 3995   4004     4. there is not an engine out condition
 3996   4005   then the Flex ISA temperature deviation (Flex_Isadev) value shall be computed as follows:
 3997   4006       Flex_Isadev = Flex_Takeoff_Temperature - Rwy_Temp
 3998   4007        where: Flex_Takeoff_Temperature = Flex temperature entered by the pilot on the Perf Take-off page, in degrees C
             » .
 3999   4008         If Origin Reference Altitude (Psorgalt) is below standard tropopause altitude then
 4000   4009            Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * Psorgalt
 4001   4010         Else
 4002   4011            Rwy_Temp = SEA_LEVEL_TEMP - TEMP_LAPSE_RATE * DEFAULT_TROPOPAUSE_ALT
 4003   4012  *Otherwise the Flex_Isadev value will be set to zero.
 4004   4013 PERF_SDD_5585(PERF_SRD_12437)
 4005   4014
 4006   4015 When flight phase is prior to descent phase with manual speed mode, then the speed validity shall be set as follows
 4007   4016         If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
 4008   4017         If CAS is selected on FCU and A/C is above crossover altitude then Valid flag for MACH speed is set to False.
 4009   4018 This TC checks for negative conditions when MACH is selected, but A/C is not below crossover altitude.
 4010   4019 PERF_SDD_07544_INT
```

```
4011  4020
4012  4021
4013  4022 INPUT                                                                                                       VALUE
4014  4023 -------------------------------------------------------------------------------------------  ------------------
           » --------
4015  4024 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »    Climb
4016  4025 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
           »     True
4017  4026 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
           »     21.0
4018  4027 Perf_Background_Dpkg.Psorgalt
           »  36090.0
4019  4028 Perf_Background_Dpkg.Flex_Isadev.Data
           »      5.0
4020  4029 Thrust_Reduction_Alt.Data(Fprequestrec_Types.Takeoff).Altitude
           »      156
4021  4030 Curacalt
           »    155.0
4022  4031 Engine_Out_I
           »     True
4023  4032 Perf_Background_Dpkg.Pcspeedmode                                                                      Perf_Ext_Tp
           » kg.Vmspd
4024  4033 Perf_Background_Dpkg.Pcmanspd.Casvalid
           »     True
4025  4034 Perf_Background_Dpkg.Psacalt
           »  20000.0
4026  4035 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt
           »  10000.0
4027  4036 Machmode
           »     True
4028  4037
4029  4038
4030  4039 OUTPUT                                                        EXPECTED               TOLERANCE            ACTUAL
           »           P/F
4031  4040 ----------------------------------------------------  ----------------------------  -------------  ------------------
           » --------  ----
4032  4041 Perf_Background_Dpkg.Flex_Isadev.Data                                    0.0            0.001                  0.0
           » 0000E+00  P
4033  4042 Perf_Background_Dpkg.Pcmanspd.Casvalid                                  True            (N/A)
           »     TRUE  P
4034  4043
4035  4044
4036  4045 ====> All 2 Comparisons Passed <====


TESTID: 24

    A/C is in Cruise and current itin is Current Mode Predictions (Normal) so target speed is
    limited by calling the speed envelope module.

    The previous non-envelope-limited target speed is set to the current VG MACH speed target
    and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
    if all of the following are true:
      - A VG speed change target is not currently being applied and the flight phase is less than Approach;
      - Current flight phase is cruise and the aircraft is at above 24950 ft
        and the current VG CAS target is below of Climb speed limit speed.

    If the current itinerary is one of the following:
    - Active Primary Flight Plan Predictions;
    - Temporary Primary Flight Plan Predictions;
    -Current mode predictions(Normal or High priority);
    - Optimum altitude predictions;
    then the descent path shall be retrieved from the descent path object
    manager via a call to Perf_Ext_Despath.Pgvdespath.

    When flight phase is prior to descent phase with manual speed mode, then the speed validity shall be set as follow
» s
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
        If CAS is selected on FCU and A/C is above crossover altitude then Valid flag for MACH speed is set to False.
    CAS is selected on FCU and A/C is above crossover altitude in this TC.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3055_INT, PERF_SDD_3053_INT, PERF_SDD_3888_INT, PERF_SDD_07544_INT.
    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Navigation_Data.Aircraft_Altitude
»  25000.0
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
```

```
            »    False
 4075  4084 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
            »    False
 4076  4085 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
            »     True
 4077  4086 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
            »     True
 4078  4087 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
            »     True
 4079  4088 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
            »     True
 4080  4089 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
            »     True
 4081  4090 Perf_Dpkg.Min_Gwt
            »    100.0
 4082  4091 Perf_Dpkg.Max_Gwt
            »    400.0
 4083  4092 Perf_Background_Dpkg.Pcactorsec                                                                S
            » econdary
 4084  4093 Perf_Background_Dpkg.Psignorehm
            »     True
 4085  4094 Perf_Background_Dpkg.Flight_Plan_Type                                                  Copy_Fro
            » m_Active
 4086  4095 Perf_Background_Dpkg.Pcfltphase
            » Approach
 4087  4096 Perf_Background_Dpkg.Ats_Enable
            »     True
 4088  4097 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
            »   Cruise
 4089  4098 Perf_Background_Dpkg.Psacalt
            »  25000.0
 4090  4099 Perf_Database_Dpkg.Psmmo
            »     0.45
 4091  4100 Perf_Background_Dpkg.Pszfw
            »    300.0
 4092  4101 Perf_Background_Dpkg.Psblockfuel
            »     50.0
 4093  4102 Perf_Background_Dpkg.Pstaxifuel
            »     25.0
 4094  4103 Perf_Background_Dpkg.Psairborne
            »     True
 4095  4104 Perf_Background_Dpkg.Psautolat
            »    False
 4096  4105 Guid_Ext_Dpkg.Gcxxlatautoc
```

```
               »     True
 4097   4106 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
               »    False
 4098   4107 Perf_Background_Dpkg.Psengout
               »     True
 4099   4108 Cdk_Vert_Dpkg:Body.Engine_Out_I
               »     True
 4100   4109 Perf_Background_Dpkg.Pcholdflags.Hmdecel
               »     True
 4101   4110 Perf_Dpkg.Repredict_Hm_Decel
               »     True
 4102   4111 Perf_Background_DPkg.Pshmdecel
               »     True
 4103   4112 Perf_Background_Dpkg.Pcholdflags.Hmactive
               »     True
 4104   4113 Perf_Ads_Dpkg.Fi_Enabled
               »     True
 4105   4114 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
               »    False
 4106   4115 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
               »     True
 4107   4116 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
               »     True
 4108   4117 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
               »     True
 4109   4118 Perf_Background_Dpkg.Pcholdflags.Hmdistval
               »     True
 4110   4119 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
               »     True
 4111   4120 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
               »     True
 4112   4121 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
               »     True
 4113   4122 Perf_Background_Dpkg.Psappspdlat
               »     True
 4114   4123 Perf_Dpkg.Pcengoutprds
               »   Altpln
 4115   4124 Perf_Background_Dpkg.Pcpathref
               »   Onpath
 4116   4125 Guid_Ext_Dpkg.Va3Vertmde                                                                                     Perf_Ext_Tpk
               » g.Vmnone
 4117   4126 Perf_Background_DPkg.Pscurcas
               »      5.0
 4118   4127 Perf_Background_DPkg.Pscurmach
```

```
                 »      5.0
 4119   4128 Perf_Background_DPkg.Pscurtas
                 »      5.0
 4120   4129 Perf_Background_Dpkg.Pcitin.Itinerary                                                                         Current_Mo
                 » de_Preds
 4121   4130 Perf_Background_Dpkg.Psenginesoff
                 »     True
 4122   4131 Perf_Despath_Dpkg.Pcdespath.Vgavalid
                 »     True
 4123   4132 Perf_Background_Dpkg.Pstogwtval
                 »    False
 4124   4133 Perf_Background_Dpkg.Pstogwt
                 »     50.0
 4125   4134 Perf_Background_Dpkg.Pcgwind
                 »  Invalid
 4126   4135 Perf_Background_Dpkg.Psgw
                 »      0.0
 4127   4136 Perf_Dpkg.Gross_Weight.Status
                 »    Valid
 4128   4137 Perf_Dpkg.Gross_Weight.Data
                 »    150.0
 4129   4138 Perf_Integration_DPkg.Pcairbrakes
                 »   Fullab
 4130   4139 Perf_Background_Dpkg.Pcacconfig
                 »        5
 4131   4140 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
                 »     True
 4132   4141 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
                 »  25004.0
 4133   4142 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
                 »    400.0
 4134   4143 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
                 »    False
 4135   4144 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
                 »    265.0
 4136   4145 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
                 »     0.55
 4137   4146 Perf_Background_Dpkg.Psstpclbact
                 »     True
 4138   4147 Perf_Background_Dpkg.Psstpdesact
                 »     True
 4139   4148 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
                 »      0.0
 4140   4149 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
            »      0.0
4141  4150  Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
            »     0.65
4142  4151  Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
            »    345.0
4143  4152  Perf_Background_Dpkg.Pccuraltcstr.Valid
            »     True
4144  4153  Perf_Background_Dpkg.Pcprebcalt.Valid
            »     True
4145  4154  Perf_Background_Dpkg.Pcgmttime.Hour
            »        1
4146  4155  Perf_Background_Dpkg.Pcgmttime.Minute
            »        1
4147  4156  Perf_Background_Dpkg.Pcgmttime.Second
            »        1
4148  4157  Perf_Background_Dpkg.Psinertvs
            »      5.0
4149  4158  Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
            »        0
4150  4159  Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
            »        2
4151  4160  Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
            »        0
4152  4161  Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
            »        2
4153  4162  Perf_Ads_Dpkg.Pr_Enabled
            »    False
4154  4163  ATC_DISCRETES_PKG:body.Adson_Flag
            »     True
4155  4164  Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid
            »     True
4156  4165  Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
            »    False
4157  4166  Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
            »     True
4158  4167  Perf_Background_Dpkg.Pcoldcasmchi
            »      Cas
4159  4168  Perf_Ads_Dpkg.Ii_Enabled
            »    False
4160  4169  CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
            »     true
4161  4170  CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
            »     true
4162  4171  ^Noise_End_Alt_Status                                                                                    Takeoff_Alt_Type
```

```
            » s.Active
 4163  4172 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints
            »       (0)
 4164  4173 Perf_Background_Dpkg.Pcitin.Flight_Plan
            »   Active
 4165  4174 Perf_Background_Dpkg.Pcspeedmode                                                                                Perf_Ext_Tp
            » kg.Vmspd
 4166  4175 Perf_Background_Dpkg.Pcmanspd.Machvalid
            »     True
 4167  4176 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt
            »     50.0
 4168  4177 Machmode
            »    False
 4169  4178
 4170  4179
 4171  4180 OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
            »           P/F
 4172  4181 ----------------------------------------------------  ----------------------------  -------------  ------------------
            » --------  ----
 4173  4182 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec                                 True          (N/A)
            »     TRUE  P
 4174  4183
 4175  4184
 4176  4185 INPUT                                                                                                          VALUE
 4177  4186 ----------------------------------------------------------------------------------------------  ------------------
            » --------
 4178  4187 Perf_Background_Dpkg.Pcfltphase
            »   Cruise
 4179  4188 Perf_Background_Dpkg.Psacalt
            »  25001.0
 4180  4189 Perf_Integration_Dpkg.Psoldnoentgt
            »      1.0
 4181  4190 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
            »    False
 4182  4191 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
            »    False
 4183  4192
 4184  4193
 4185  4194 OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
            »           P/F
 4186  4195 ----------------------------------------------------  ----------------------------  -------------  ------------------
            » --------  ----
 4187  4196 Perf_Integration_Dpkg.Psoldnoentgt                                               0.0          0.001                 0.0
            » 0000E+00  P
 4188  4197 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                      True          (N/A)
            »     TRUE  P
 4189  4198 Perf_Background_Dpkg.Pcoldcasmchi                                   Fmcs_Base_Types.Mach          (N/A)
            »     MACH  P
 4190  4199 Perf_Background_Dpkg.Pcmanspd.Machvalid                                           False          (N/A)
            »    FALSE  P
 4191  4200 
 4192  4201 
 4193  4202 ====> All 5 Comparisons Passed <====
 4194  4203 
 4195  4204 
 4196  4205 TESTID: 25
 4197  4206 
 4198  4207     A/C is in Cruise and current itin is Current Mode Predictions (High priority) so target speed is
 4199  4208     limited by calling the speed envelope module.
 4200  4209 
 4201  4210     If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
 4202  4211    - Perf hold flag record (Pcholdflags) is copied from guidance
 4203  4212    - Descent limit latch record (Pcdeslimlat) is copied from guidance.
 4204  4213    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
            » h.
 4205  4214    - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
            »  considers
 4206  4215      the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
 4207  4216    - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
            »  HM if no
 4208  4217      deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
            » lear the HM
 4209  4218      leg deleted while in decel to HM flag (Pshmdeleted).
 4210  4219    - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
            » d, and the
 4211  4220      HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
            » t is within
 4212  4221      the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
 4213  4222    - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
            » l to HM,
 4214  4223      then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
 4215  4224     PERF_SDD_4794_INT
 4216  4225 
 4217  4226     The previous non-envelope-limited target speed is set to the current VG MACH speed target
 4218  4227     and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
 4219  4228     if all of the following are true:
 4220  4229       - A VG speed change target is not currently being applied and the flight phase is less than Approach
 4221  4230         (here flight phase is cruise);
```

```
      - Current flight phase is cruise and the aircraft is at above 24950 ft
        and the Climb speed limit altitude is not included or the aircraft is at or above climb speed limit altitude;

    If the current itinerary is one of the following:
    - Active Primary Flight Plan Predictions;
    - Temporary Primary Flight Plan Predictions;
    -Current mode predictions(Normal or High priority);
    - Optimum altitude predictions;
    then the descent path shall be retrieved from the descent path object
    manager via a call to Perf_Ext_Despath.Pgvdespath.

    When flight phase is prior to descent phase with manual speed mode, then the speed validity shall be set as follow
» s
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
        If CAS is selected on FCU and A/C is above crossover altitude then Valid flag for MACH speed is set to False.
    MACH is selected on FCU and A/C is below crossover altitude in this TC.

    In this case, we set the corresponding condition and verify:
    (1)Repredict_Hm_Decel is Remain false as the Initialization.  (F,F)
    (2)the HM leg deleted while in decel to HM flag is not Cleared(Pshmdeleted)  (F,T,T)
    (3)flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
» e (T,F,T)
    (4)flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to false (F, T)
    (5)Perf hold flag record (Pcholdflags) is copied from guidance
    (6)Descent limit latch record (Pcdeslimlat) is copied from guidance
    (7)Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3055_INT, PERF_SDD_3053_INT, PERF_SDD_3888_INT,
                                    PERF_SDD_07544_INT, PERF_SDD_4794_INT
    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
            »    False
4259  4268  CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
            »     True
4260  4269  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
            »     True
4261  4270  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
            »     True
4262  4271  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
            »     True
4263  4272  CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
            »     True
4264  4273  Perf_Dpkg.Min_Gwt
            »    100.0
4265  4274  Perf_Dpkg.Max_Gwt
            »    400.0
4266  4275  Perf_Background_Dpkg.Pcactorsec
            »   Active
4267  4276  Perf_Background_Dpkg.Psignorehm
            »     True
4268  4277  Perf_Background_Dpkg.Flight_Plan_Type                                                                      Copy_Fro
            » m_Active
4269  4278  Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
            »   Cruise
4270  4279  Perf_Background_Dpkg.Ats_Enable
            »     True
4271  4280  Perf_Background_Dpkg.Psacalt
            »  25001.0
4272  4281  Perf_Database_Dpkg.Psmmo
            »     0.45
4273  4282  Perf_Background_Dpkg.Pszfw
            »    300.0
4274  4283  Perf_Background_Dpkg.Psblockfuel
            »     50.0
4275  4284  Perf_Background_Dpkg.Pstaxifuel
            »     25.0
4276  4285  Perf_Background_Dpkg.Psairborne
            »     True
4277  4286  Perf_Background_Dpkg.Psautolat
            »    False
4278  4287  Guid_Ext_Dpkg.Gcxxlatautoc
            »     True
4279  4288  Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
            »    False
4280  4289  Perf_Background_Dpkg.Psengout
```

```
            »     True
4281  4290  Cdk_Vert_Dpkg:Body.Engine_Out_I
            »     True
4282  4291  Perf_Dpkg.Repredict_Hm_Decel
            »    False
4283  4292  Perf_Background_DPkg.Pshmdecel
            »     True
4284  4293  Perf_Background_Dpkg.Pcholdflags.Hmactive
            »     True
4285  4294  Perf_Ads_Dpkg.Fi_Enabled
            »    false
4286  4295  Perf_Background_Dpkg.Pcholdflags.Manhmwarn
            »     True
4287  4296  Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
            »     True
4288  4297  Perf_Background_Dpkg.Pcholdflags.Hmdistval
            »     True
4289  4298  Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
            »     True
4290  4299  Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
            »     True
4291  4300  Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
            »     True
4292  4301  Perf_Dpkg.Pcengoutprds
            »   Altpln
4293  4302  Perf_Background_Dpkg.Pcpathref
            »   Onpath
4294  4303  Guid_Ext_Dpkg.Va3Vertmde                                                                    Perf_Ext_Tp
            » kg.Vmspd
4295  4304  Perf_Background_DPkg.Pscurcas
            »      5.0
4296  4305  Perf_Background_DPkg.Pscurmach
            »      5.0
4297  4306  Perf_Background_DPkg.Pscurtas
            »      5.0
4298  4307  Perf_Background_Dpkg.Pcitin.Itinerary                                                       Current_Mod
            » e_Hi_Pri
4299  4308  Perf_Background_Dpkg.Psenginesoff
            »     True
4300  4309  Perf_Despath_Dpkg.Pcdespath.Vgavalid
            »     True
4301  4310  Perf_Background_Dpkg.Pstogwtval
            »    False
4302  4311  Perf_Background_Dpkg.Pstogwt
```

```
            »     50.0
 4303  4312 Perf_Background_Dpkg.Pcgwind
            »  Invalid
 4304  4313 Perf_Background_Dpkg.Psgw
            »      0.0
 4305  4314 Perf_Dpkg.Gross_Weight.Status
            »    Valid
 4306  4315 Perf_Dpkg.Gross_Weight.Data
            »    150.0
 4307  4316 Perf_Integration_DPkg.Pcairbrakes
            »   Fullab
 4308  4317 Perf_Background_Dpkg.Pcacconfig
            »        5
 4309  4318 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
            »    False
 4310  4319 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
            »   9000.0
 4311  4320 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
            »    300.0
 4312  4321 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
            »    False
 4313  4322 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
            »    265.0
 4314  4323 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
            »     0.55
 4315  4324 Perf_Background_Dpkg.Psstpclbact
            »     True
 4316  4325 Perf_Background_Dpkg.Psstpdesact
            »     True
 4317  4326 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
            »      0.0
 4318  4327 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
            »      0.0
 4319  4328 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
            »     0.65
 4320  4329 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
            »    345.0
 4321  4330 Perf_Background_Dpkg.Pccuraltcstr.Valid
            »     True
 4322  4331 Perf_Background_Dpkg.Pcprebcalt.Valid
            »     True
 4323  4332 Perf_Background_Dpkg.Pcgmttime.Hour
            »        1
 4324  4333 Perf_Background_Dpkg.Pcgmttime.Minute
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
               »        1
 4325    4334  Perf_Background_Dpkg.Pcgmttime.Second
               »        1
 4326    4335  Perf_Background_Dpkg.Psinertvs
               »      5.0
 4327    4336  Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
               »        0
 4328    4337  Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
               »        2
 4329    4338  Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
               »        0
 4330    4339  Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
               »        2
 4331    4340  Perf_Ads_Dpkg.Pr_Enabled
               »    False
 4332    4341  ATC_DISCRETES_PKG:body.Adson_Flag
               »     True
 4333    4342  Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid
               »     True
 4334    4343  Perf_Ads_Dpkg.Ii_Enabled
               »    False
 4335    4344  CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
               »     true
 4336    4345  CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
               »     true
 4337    4346  ^Noise_End_Alt_Status                                                                                    Takeoff_Alt_Type
               » s.Active
 4338    4347  CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints
               »      (0)
 4339    4348  Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
               »    false
 4340    4349  Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
               »    False
 4341    4350  Perf_Background_Dpkg.Pcitin.Flight_Plan
               »   Active
 4342    4351  Navigation_Data.Aircraft_Altitude
               »  25001.0
 4343    4352  Perf_Background_Dpkg.Pcoldcasmchi
               »      Cas
 4344    4353  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
               »    False
 4345    4354  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel
               »    False
 4346    4355  Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn
```

```
             »     True
 4347   4356 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel
             »    False
 4348   4357 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv
             »    False
 4349   4358 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval
             »    False
 4350   4359 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm
             »     True
 4351   4360 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
             »     True
 4352   4361 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
             »     True
 4353   4362 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel
             »     True
 4354   4363 Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt
             »      0.0
 4355   4364 Perf_Dpkg.Pshmdeleted
             »     True
 4356   4365 CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt
             »  25001.0
 4357   4366 Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt
             »  25001.1
 4358   4367 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
             »     true
 4359   4368 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
             »     True
 4360   4369 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
             »     True
 4361   4370 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
             »     true
 4362   4371 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
             »     True
 4363   4372 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
             »     True
 4364   4373 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
             »    20000
 4365   4374 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
             »     79.0
 4366   4375 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
             »   -100.0
 4367   4376 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
             »      0.5
 4368   4377 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas
```

```
             »     50.0
  4369  4378 Perf_Background_Dpkg.Pcholdflags.Hmactive
             »     True
  4370  4379 Perf_Background_Dpkg.Pcholdflags.Hmdecel
             »     True
  4371  4380 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
             »    False
  4372  4381 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
             »     True
  4373  4382 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
             »     True
  4374  4383 Perf_Background_Dpkg.Pcholdflags.Hmdistval
             »     True
  4375  4384 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
             »    False
  4376  4385 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
             »    False
  4377  4386 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
             »    False
  4378  4387 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
             »    False
  4379  4388 Perf_Background_Dpkg.Psappspdlat
             »     true
  4380  4389 Perf_Background_Dpkg.Psconsider_Hm
             »     True
  4381  4390 Perf_Background_Dpkg.Pshmdecel
             »     true
  4382  4391 Perf_Integration_Dpkg.Psoldnoentgt
             »      1.0
  4383  4392 Perf_Background_Dpkg.Pcmanspd.Casvalid
             »     True
  4384  4393
  4385  4394
  4386  4395 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
             »           P/F
  4387  4396 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
  4388       ~~Perf_Integration_Dpkg.Psoldnoentgt                                               0.0          0.001                 2.9~~
             ~~» 0227E-38  P~~
        4397 Perf_Integration_Dpkg.Psoldnoentgt                                               0.0          0.001                 0.0
             » 0000E+00  P
  4389  4398 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                                   True          (N/A)
             »     TRUE  P
  4390  4399 Perf_Background_Dpkg.Pcoldcasmchi                               Fmcs_Base_Types.Mach          (N/A)
```

```
           »     MACH  P
 4391  4400 Perf_Background_Dpkg.Pcholdflags.Hmactive                                     False          (N/A)
           »    FALSE  P
 4392  4401 Perf_Background_Dpkg.Pcholdflags.Hmdecel                                      False          (N/A)
           »    FALSE  P
 4393  4402 Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                     True          (N/A)
           »     TRUE  P
 4394  4403 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                    False          (N/A)
           »    FALSE  P
 4395  4404 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                    False          (N/A)
           »    FALSE  P
 4396  4405 Perf_Background_Dpkg.Pcholdflags.Hmdistval                                    False          (N/A)
           »    FALSE  P
 4397  4406 Perf_Background_Dpkg.Pcholdflags.Consider_Hm                                   True          (N/A)
           »     TRUE  P
 4398  4407 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                       True          (N/A)
           »     TRUE  P
 4399  4408 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                      True          (N/A)
           »     TRUE  P
 4400  4409 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                                     True          (N/A)
           »     TRUE  P
 4401  4410 Perf_Dpkg.Pshmdeleted                                                      /= false          (N/A)
           »     TRUE  P
 4402  4411 Perf_Background_Dpkg.Pshmdecel                                                False          (N/A)
           »    FALSE  P
 4403  4412 Perf_Background_Dpkg.Pcmanspd.Casvalid                                        False          (N/A)
           »    FALSE  P
 4404  4413 Perf_Background_Dpkg.Psappspdlat                                              false          (N/A)
           »    FALSE  P
 4405  4414 Perf_Background_Dpkg.Psconsider_Hm                                            False          (N/A)
           »    FALSE  P
 4406  4415 Perf_Dpkg.Repredict_Hm_Decel                                                  False          (N/A)
           »    FALSE  P
 4407  4416 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec                                True          (N/A)
           »     TRUE  P
 4408  4417
 4409  4418
 4410  4419 ====> All 20 Comparisons Passed <====
 4411  4420
 4412  4421
 4413  4422 TESTID: 26
 4414  4423
 4415  4424     The previous non-envelope-limited target speed is set to the current VG MACH speed target
 4416  4425     and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
    if all of the following are true:
      - A VG speed change target is not currently being applied and The flight phase is less than Approach
        (here flight phase is Takeoff);
      - A CMS is currently active and the aircraft is above climb speed limit altitude;

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3053_INT
    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
»    False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
»     True
Perf_Dpkg.Min_Gwt
»    100.0
Perf_Dpkg.Max_Gwt
»    400.0
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.Psignorehm
»     True
Perf_Background_Dpkg.Flight_Plan_Type                                                                         Copy_Fro
» m_Active
Perf_Background_Dpkg.Pcfltphase
» Approach
```

```
 4444   4453 Perf_Background_Dpkg.Ats_Enable
             »     True
 4445   4454 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »   Cruise
 4446   4455 Perf_Background_Dpkg.Psacalt
             »  25001.0
 4447   4456 Perf_Database_Dpkg.Psmmo
             »     0.45
 4448   4457 Perf_Background_Dpkg.Pszfw
             »    300.0
 4449   4458 Perf_Background_Dpkg.Psblockfuel
             »     50.0
 4450   4459 Perf_Background_Dpkg.Pstaxifuel
             »     25.0
 4451   4460 Perf_Background_Dpkg.Psairborne
             »     True
 4452   4461 Perf_Background_Dpkg.Psautolat
             »    False
 4453   4462 Guid_Ext_Dpkg.Gcxxlatautoc
             »     True
 4454   4463 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
             »     True
 4455   4464 Perf_Background_Dpkg.Psengout
             »     True
 4456   4465 Cdk_Vert_Dpkg:Body.Engine_Out_I
             »     True
 4457   4466 Perf_Dpkg.Repredict_Hm_Decel
             »     True
 4458   4467 Perf_Background_DPkg.Pshmdecel
             »     True
 4459   4468 Perf_Background_Dpkg.Pcholdflags.Hmactive
             »     True
 4460   4469 Perf_Ads_Dpkg.Fi_Enabled
             »     True
 4461   4470 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
             »    False
 4462   4471 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
             »     True
 4463   4472 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
             »     True
 4464   4473 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
             »     True
 4465   4474 Perf_Background_Dpkg.Pcholdflags.Hmdistval
             »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 4466   4475 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
             »     True
 4467   4476 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
             »     True
 4468   4477 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
             »     True
 4469   4478 Perf_Background_Dpkg.Psappspdlat
             »     True
 4470   4479 Perf_Dpkg.Pcengoutprds
             »   Altpln
 4471   4480 Perf_Background_Dpkg.Pcpathref
             »   Onpath
 4472   4481 Guid_Ext_Dpkg.Va3Vertmde                                                                                                Perf_Ext_Tpk
             » g.Vmnone
 4473   4482 Perf_Background_DPkg.Pscurcas
             »      5.0
 4474   4483 Perf_Background_DPkg.Pscurmach
             »      5.0
 4475   4484 Perf_Background_DPkg.Pscurtas
             »      5.0
 4476   4485 Perf_Background_Dpkg.Pcitin.Itinerary                                                                                    Current_Mod
             » e_Hi_Pri
 4477   4486 Perf_Background_Dpkg.Psenginesoff
             »     True
 4478   4487 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 4479   4488 Perf_Background_Dpkg.Pstogwtval
             »    False
 4480   4489 Perf_Background_Dpkg.Pstogwt
             »     50.0
 4481   4490 Perf_Background_Dpkg.Pcgwind
             »  Invalid
 4482   4491 Perf_Background_Dpkg.Psgw
             »      0.0
 4483   4492 Perf_Dpkg.Gross_Weight.Status
             »    Valid
 4484   4493 Perf_Dpkg.Gross_Weight.Data
             »    150.0
 4485   4494 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 4486   4495 Perf_Background_Dpkg.Pcacconfig
             »        5
 4487   4496 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
4488  4497 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
4489  4498 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    400.0
4490  4499 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
4491  4500 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
4492  4501 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
4493  4502 Perf_Background_Dpkg.Psstpclbact
           »     True
4494  4503 Perf_Background_Dpkg.Psstpdesact
           »     True
4495  4504 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
4496  4505 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
4497  4506 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
4498  4507 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
4499  4508 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
4500  4509 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
4501  4510 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
4502  4511 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
4503  4512 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
4504  4513 Perf_Background_Dpkg.Psinertvs
           »      5.0
4505  4514 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
           »        0
4506  4515 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
           »        2
4507  4516 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
4508  4517 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
4509  4518 Perf_Ads_Dpkg.Pr_Enabled
           »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
4510  4519 ATC_DISCRETES_PKG:body.Adson_Flag
           »     True
4511  4520 Perf_Ads_Interface_Dpkg:BODY.Predicted_Route_Data.Predicted_Data_Is_Valid
           »     True
4512  4521 Guid_Checkpoint_Resynch_Dpkg.Va3holdflags.Hmdecel
           »    False
4513  4522 Perf_Dpkg.Pshmdeleted
           »     True
4514  4523 Perf_Ads_Dpkg.Ii_Enabled
           »    False
4515  4524 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »     true
4516  4525 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »     true
4517  4526 ^Noise_End_Alt_Status                                                                                Takeoff_Alt_Type
           » s.Active
4518  4527 CTP_A350_PERF_BKGND_GET_BK_DATA.Requested_num_Waypoints
           »      (0)
4519  4528 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
           »     True
4520  4529 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
           »    False
4521  4530 Perf_Background_Dpkg.Pcitin.Flight_Plan
           »   Active
4522  4531 Navigation_Data.Aircraft_Altitude
           »  25001.0
4523  4532 Perf_Background_Dpkg.Pcoldcasmchi
           »      Cas
4524  4533 Perf_Background_Dpkg.Psacalt
           »  25001.0
4525  4534 Perf_Integration_Dpkg.Psoldnoentgt
           »      1.0
4526  4535 Perf_Background_Dpkg.Pcfltphase
           »  Takeoff
4527  4536
4528  4537
4529  4538 OUTPUT                                                         EXPECTED              TOLERANCE             ACTUAL
           »           P/F
4530  4539 ----------------------------------------------------  ----------------------------  -------------  ------------------
           » --------  ----
4531  4540 Perf_Integration_Dpkg.Psoldnoentgt                                              0.0          0.001                0.0
           » 0000E+00  P
4532  4541 Perf_Background_Dpkg.Pcoldcasmchi                             Fmcs_Base_Types.Mach          (N/A)
           »     MACH  P
```

```


====> All 2 Comparisons Passed <====


TESTID: 27

    The previous non-envelope-limited target speed is set to the current VG MACH speed target
    and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
    if all of the following are true:
      - A VG speed change target is not currently being applied and the flight phase is less than Approach
        (here flight phase is takeoff);
      - Current flight phase is not cruise or the climb/descent step is active and the aircraft is above crossover alt
» itude;

    If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
   - Perf hold flag record (Pcholdflags) is copied from guidance
   - Descent limit latch record (Pcdeslimlat) is copied from guidance.
   - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
» h.
   - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
»  considers
     the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
   - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
»  HM if no
     deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
» lear the HM
     leg deleted while in decel to HM flag (Pshmdeleted).
   - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
» d, and the
     HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
» t is within
     the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
   - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
» l to HM,
     then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
    PERF_SDD_4794_INT

    This test case verify:(the working flight plan is Temporary)
    (1)Perf hold flag record (Pcholdflags) is copied from guidance
    (2)Descent limit latch record (Pcdeslimlat) is copied from guidance
    (3)Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false
    (4)the re-evaluation indication flag is cleared (Repredict_Hm_Decel) (F,T)
    (5)HM leg deleted is cleared while in decel to HM flag (Pshmdeleted)  (F,F,T)
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 4569  4578     (6)Flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to false (F,F)
 4570  4579     (7)flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
             » e (F,F,F)
 4571  4580
 4572  4581     REQUIREMENTS UNDER EVALUATION : PERF_SDD_3053_INT, PERF_SDD_4794_INT
 4573  4582     SUPPORTING REQUIREMENTS : N/A
 4574  4583
 4575  4584
 4576  4585 INPUT                                                                                                  VALUE
 4577  4586 ---------------------------------------------------------------------------------------------------  ------------------
             » --------
 4578  4587 Perf_Background_Dpkg.Pcoldcasmchi
             »      Cas
 4579  4588 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
 4580  4589 Perf_Background_Dpkg.Flight_Plan_Type                                                                Copy_Fro
             » m_Active
 4581  4590 Perf_Background_Dpkg.Pcactorsec                                                                            T
             » emporary
 4582  4591 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
             »    False
 4583  4592 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel
             »    False
 4584  4593 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn
             »    False
 4585  4594 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel
             »     True
 4586  4595 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv
             »     True
 4587  4596 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval
             »     True
 4588  4597 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm
             »    False
 4589  4598 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
             »    False
 4590  4599 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
             »    False
 4591  4600 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel
             »    False
 4592  4601 Perf_Dpkg.Pshmdeleted
             »     True
 4593  4602 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
             »  Descent
 4594  4603 Perf_Background_Dpkg.Constant_Mach_Seg.Is_Active
```

```
                »    False
 4595   4604 CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt
                »  25001.0
 4596   4605 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
                »     true
 4597   4606 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
                »     True
 4598   4607 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
                »     true
 4599   4608 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
                »     True
 4600   4609 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
                »     True
 4601   4610 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
                »    20000
 4602   4611 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
                »     79.0
 4603   4612 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
                »    100.0
 4604   4613 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
                »     -0.5
 4605   4614 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas
                »     50.0
 4606   4615 Guid_Spds_Dpkg.Vc3curspds.Fltphase
                »  Descent
 4607   4616 Perf_Background_Dpkg.Pcholdflags.Hmactive
                »     True
 4608   4617 Perf_Background_Dpkg.Pcholdflags.Hmdecel
                »     True
 4609   4618 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
                »     True
 4610   4619 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
                »    False
 4611   4620 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
                »    False
 4612   4621 Perf_Background_Dpkg.Pcholdflags.Hmdistval
                »    False
 4613   4622 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
                »     True
 4614   4623 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
                »     True
 4615   4624 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
                »     True
 4616   4625 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
```

```
           »     True
4617  4626 Perf_Dpkg.Pshmdeleted
           »     True
4618  4627 Perf_Dpkg.Repredict_Hm_Decel
           »     True
4619  4628 Perf_Background_Dpkg.Psappspdlat
           »     True
4620  4629 Perf_Background_DPkg.Pshmdecel
           »     True
4621  4630 Perf_Background_Dpkg.Psconsider_Hm
           »     True
4622  4631 Perf_Background_Dpkg.Psappspdlat
           »     True
4623  4632 Perf_Integration_Dpkg.Psoldnoentgt
           »      1.0
4624  4633
4625  4634
4626  4635 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
           »           P/F
4627  4636 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
4628  4637 Perf_Integration_Dpkg.Psoldnoentgt                                             -0.5          0.001                -5.0
           » 0000E-01  P
4629  4638 Perf_Background_Dpkg.Pcoldcasmchi                               Fmcs_Base_Types.Mach          (N/A)
           »     MACH  P
4630  4639 Perf_Background_Dpkg.Pcholdflags.Hmactive                                     False          (N/A)
           »    FALSE  P
4631  4640 Perf_Background_Dpkg.Pcholdflags.Hmdecel                                      False          (N/A)
           »    FALSE  P
4632  4641 Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                    False          (N/A)
           »    FALSE  P
4633  4642 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                     True          (N/A)
           »     TRUE  P
4634  4643 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                     True          (N/A)
           »     TRUE  P
4635  4644 Perf_Background_Dpkg.Pcholdflags.Hmdistval                                     True          (N/A)
           »     TRUE  P
4636  4645 Perf_Background_Dpkg.Pcholdflags.Consider_Hm                                  False          (N/A)
           »    FALSE  P
4637  4646 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                      False          (N/A)
           »    FALSE  P
4638  4647 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                     False          (N/A)
           »    FALSE  P
4639  4648 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                                    False          (N/A)
```

```
»    FALSE  P
Perf_Dpkg.Repredict_Hm_Decel                                                              False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pshmdecel                                                            False          (N/A)
»    FALSE  P
Perf_Dpkg.Pshmdeleted                                                                     False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Psconsider_Hm                                                        False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Psappspdlat                                                          False          (N/A)
»    FALSE  P


====> All 17 Comparisons Passed <====


TESTID: 28

    The previous non-envelope-limited target speed is set to the current VG MACH speed target
    and the previous CAS/Mach speed indicator is set to indicate MACH speed type,
    if all of the following are true:
      - A VG speed change target is not currently being applied and the flight phase is less than Approach
       (here flight phase is Cruise);
      - Current flight phase is not cruise or the climb/descent step is active and the aircraft is above crossover alt
» itude;

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_3053_INT.
    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                       VALUE
----------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_DPkg.Pshmdecel
»    False
Perf_Background_Dpkg.Pcoldcasmchi
»      Cas
Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
»   9000.0
Perf_Background_Dpkg.Pcfltphase
»   Cruise
Perf_Background_Dpkg.Psacalt
»  25001.0
Perf_Background_Dpkg.Constant_Mach_Seg.Is_Active
```

```
»    False
Perf_Integration_Dpkg.Psoldnoentgt
»      1.0
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
»     True


OUTPUT                                                        EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  -------------  -----------------
» --------  ----
Perf_Integration_Dpkg.Psoldnoentgt                                           0.0           0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pcoldcasmchi                              Fmcs_Base_Types.Mach          (N/A)
»     MACH  P


====> All 2 Comparisons Passed <====


TESTID: 29

    When the flight phase is approach, the descent path reference shall be set to
    the guidance descent path reference(Va3pathref).
    PERF_SDD_07500_INT

    If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
» s are on,
    the aircraft gross weight shall be set to any one of the following:
   - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
» craft
     gross weight and Take Off gross weight being valid
   - Aircraft GW from the Performance Weights function,  if the flight phase is other
     than takeoff or before, or the aircraft gross weight or the Take Off gross weight
     being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT
    --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is active,the flight
»  phase is
    --Approach,then Aircraft GW from the Performance Weights function.

    If the mach target and the fcu mach selected mode retrieved from IO via Io_Fg_Fm_Internal_Dpkg.Mach_Target are val
```

```
             » id,
 4704   4713     then the speed target tag shall be set to indicate Mach and the speed target is set the value of mach target.
 4705   4714     PERF_SDD_07502_INT
 4706   4715     If the CAS target from IO is valid and the fcu mach selected mode retrieved from IO is invalid,
 4707   4716     then the speed target tag shall be set to indicate CAS and the speed target is set the value of CAS target.
 4708   4717     PERF_SDD_07503_INT
 4709   4718     --In this tese case, the mach target and the CAS target are valid, the fcu mach selected mode is valid
 4710   4719
 4711   4720     When the FPA mode active and the target retrieved from IO are valid,
 4712   4721     then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
 4713   4722     The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
             »  retrieved
 4714   4723     from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
             » rom ft/min
 4715   4724     to ft/sec. The flag indicating the vertical speed mode active is set to True.
 4716   4725     PERF_SDD_07504_INT
 4717   4726      --In this tese case, the FPA mode active and the target retrieved from IO are valid
 4718   4727     The destination QNH data shall be initialized to standard QNH if it is invalid with the destination being defined
 4719   4728     PERF_SDD_07505_INT
 4720   4729     --In this test case, The destination QNH data is invalid and the destination being defined
 4721   4730     If the current itinerary is neither Current Mode Predictions (Normal or High priority)
 4722   4731     nor Pred_to_alt itinerary, then the vertical mode(Pcvertmode) shall be set to Econ mode.
 4723   4732     PERF_SDD_07506(PERF_SRD_6192)
 4724   4733     --In this teste case, the current itinerary is No_Itinerary, Pcvertmode shall be set to Econ mode
 4725   4734     ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is th
             » e first pass
 4726   4735     of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
 4727   4736     PERF_SDD_08225_INT
 4728   4737     --In this test case, all the condition are true and FLIGHT PHASE is approach
 4729   4738     During descent or approach with current target speeds from FG are valid, ECON CAS limited by speed constraint othe
             » r than
 4730   4739     speed limit shall be set to current CAS speed if partially limited managed speed target is zero else it is set to
 4731   4740     partially limited managed speed target.
 4732   4741     PERF_SDD_07540
 4733   4742     --In this test case, During approach the partially limited managed speed target is not zero
 4734   4743     During descent or approach with current target speeds from FG are valid, if speed limit or ICAO limit is latched i
             » n descent
 4735   4744     then ECON/LRC (based on the selected flight criterion), CAS limited flag shall be set to true.
 4736   4745     PERF_SDD_08227_INT
 4737   4746    --In this test case, During approach speed limit is true but ICAO limit is false
 4738   4747     If current target speeds from FG are valid, then the speed change target restriction record from VG is copied to P
             » erf and
 4739   4748     the speed change apply flag shall be set if the aircraft is in the deceleration zone to HM.
 4740   4749     PERF_SDD_07542_INT
```

```
4741  4750     --In this tese case, current target speeds from FG are valid and the aircraft is not in the deceleration zone
4742  4751     If current target speeds from FG are valid, then the speed change Ident from VG speed change target restriction re
           » cord shall
4743  4752     be saved to the global Speed Change Ident.
4744  4753     PERF_SDD_08171_INT
4745  4754
4746  4755     Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
4747  4756     are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
           » d to FL250.
4748  4757     PERF_SDD_07543_INT
4749  4758     --In this test case, VG speed targets are all valid and greater than lower limits
4750  4759     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07500_INT, PERF_SDD_07501_INT, PERF_SDD_07502_INT, PERF_SDD_07503_INT,
4751  4760                                     PERF_SDD_07504_INT, PERF_SDD_07505_INT, PERF_SDD_07506(PERF_SRD_6192), PERF_SDD_08
           » 225_INT,
4752  4761                                     PERF_SDD_07540, PERF_SDD_08227_INT, PERF_SDD_07542_INT, PERF_SDD_07543_INT,
4753  4762                                     PERF_SDD_08171_INT
4754  4763     SUPPORTING REQUIREMENTS : N/A
4755  4764
4756  4765
4757  4766 INPUT                                                                                                        VALUE
4758  4767 -------------------------------------------------------------------------------------------------  ------------------
           » --------
4759  4768 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
           »     True
4760  4769 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »     True
4761  4770 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
4762  4771 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
4763  4772 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
4764  4773 Perf_Dpkg.Min_Gwt
           »    100.0
4765  4774 Perf_Dpkg.Max_Gwt
           »    400.0
4766  4775 Perf_Background_Dpkg.Flight_Plan_Type                                                                          I
           » s_Active
4767  4776 Perf_Background_Dpkg.Ats_Enable
           »     True
4768  4777 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           » Approach
4769  4778 Perf_Database_Dpkg.Psmmo
           »     0.45
```

```
4770   4779 Perf_Background_Dpkg.Pszfw
            »    300.0
4771   4780 Perf_Background_Dpkg.Psblockfuel
            »     50.0
4772   4781 Perf_Background_Dpkg.Pstaxifuel
            »     25.0
4773   4782 Perf_Background_Dpkg.Psairborne
            »    False
4774   4783 Perf_Background_Dpkg.Psautolat
            »     True
4775   4784 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
            »    False
4776   4785 Perf_Background_Dpkg.Psengout
            »     True
4777   4786 Cdk_Vert_Dpkg:Body.Engine_Out_I
            »    False
4778   4787 Perf_Background_Dpkg.Pcholdflags.Hmdecel
            »     True
4779   4788 Perf_Dpkg.Repredict_Hm_Decel
            »     True
4780   4789 Perf_Background_DPkg.Pshmdecel
            »     True
4781   4790 Perf_Background_Dpkg.Pcholdflags.Hmactive
            »     True
4782   4791 Perf_Ads_Dpkg.Fi_Enabled
            »    False
4783   4792 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
            »    False
4784   4793 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
            »     True
4785   4794 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
            »     True
4786   4795 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
            »     True
4787   4796 Perf_Background_Dpkg.Pcholdflags.Hmdistval
            »     True
4788   4797 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
            »     True
4789   4798 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
            »     True
4790   4799 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
            »     True
4791   4800 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
            »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
4792   4801 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
            »     True
4793   4802 Perf_Background_Dpkg.Psappspdlat
            »     True
4794   4803 Perf_Dpkg.Pcengoutprds
            »   Altpln
4795   4804 Perf_Background_DPkg.Pscurcas
            »      5.0
4796   4805 Perf_Background_DPkg.Pscurmach
            »      5.0
4797   4806 Perf_Background_DPkg.Pscurtas
            »      5.0
4798   4807 Perf_Background_Dpkg.Pcitin.Itinerary                                                                                    No_I
            » tinerary
4799   4808 Perf_Despath_Dpkg.Pcdespath.Vgavalid
            »     True
4800   4809 Perf_Background_Dpkg.Pstogwtval
            »     True
4801   4810 Perf_Background_Dpkg.Pstogwt
            »     50.0
4802   4811 Perf_Background_Dpkg.Pcgwind
            »    valid
4803   4812 Perf_Background_Dpkg.Psgw
            »      0.0
4804   4813 Perf_Dpkg.Gross_Weight.Status
            »    Valid
4805   4814 Perf_Dpkg.Gross_Weight.Data
            »    150.0
4806   4815 Perf_Integration_DPkg.Pcairbrakes
            »   Fullab
4807   4816 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
            »    False
4808   4817 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
            »   9000.0
4809   4818 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
            »    200.0
4810   4819 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
            »    False
4811   4820 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
            »    265.0
4812   4821 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
            »     0.55
4813   4822 Perf_Background_Dpkg.Psstpclbact
            »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
4814  4823 Perf_Background_Dpkg.Psstpdesact
           »     True
4815  4824 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
4816  4825 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
4817  4826 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »    0.011
4818  4827 Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid
           »     True
4819  4828 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    10.01
4820  4829 Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid
           »     True
4821  4830 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
4822  4831 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
4823  4832 Perf_Background_Dpkg.Pcgmttime.Hour
           »        2
4824  4833 Perf_Background_Dpkg.Pcgmttime.Minute
           »        2
4825  4834 Perf_Background_Dpkg.Pcgmttime.Second
           »        2
4826  4835 Perf_Background_Dpkg.Psinertvs
           »      5.0
4827  4836 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
           »        0
4828  4837 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
           »        2
4829  4838 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
4830  4839 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
4831  4840 Perf_Ads_Dpkg.Pr_Enabled
           »    False
4832  4841 ATC_DISCRETES_PKG:body.Adson_Flag
           »    False
4833  4842 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
           »     true
4834  4843 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
           »     true
4835  4844 ^Noise_End_Alt_Status                                                                                  Takeoff_Alt_Type
           » s.Active
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
4836  4845 ^Noise_Speed_Val
           »     True
4837  4846 ^Noise_TSPD.valid
           »     True
4838  4847 ^Noise_TSPD.Data
           »    150.0
4839  4848 ^Noise_End_Alt
           »    300.0
4840  4849 ^Noise_Speed
           »    250.0
4841  4850 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
           »     True
4842  4851 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
           »     True
4843  4852 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
           »     21.0
4844  4853 Perf_Background_Dpkg.Psorgalt
           »  36080.0
4845  4854 Perf_Background_Dpkg.Noise_Data.Altitude.Data
           »      0.0
4846  4855 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
           »    False
4847  4856 Perf_Background_Dpkg.Noise_Data.Speed.Data
           »      0.0
4848  4857 Perf_Background_Dpkg.Noise_Data.Speed.Valid
           »    False
4849  4858 Perf_Background_Dpkg.Noise_Data.Tspd.Data
           »      0.0
4850  4859 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
           »    False
4851  4860 Perf_Background_Dpkg.Psacalt
           »     50.0
4852  4861 Perf_Background_Dpkg.Psacaltv
           »     True
4853  4862 Perf_Background_Dpkg.Pstruetrkv
           »     True
4854  4863 Perf_Background_Dpkg.Psvgrnd
           »      1.0
4855  4864 Perf_Background_Dpkg.Psvgrndval
           »     True
4856  4865 Perf_Background_Dpkg.Pcacposn.Data.Lat
           »    100.0
4857  4866 Perf_Background_Dpkg.Pcacposn.Data.Lon
           »    100.0
```

```
 4858  4867 Perf_Background_Dpkg.Pcacposn.Valid
            »    false
 4859  4868 Perf_Background_Dpkg.Pstruetrack
            »      0.2
 4860  4869 Perf_Background_Dpkg.Pswindbrg
            »    150.0
 4861  4870 Perf_Background_Dpkg.Pswindmag
            »    130.0
 4862  4871 Perf_Background_Dpkg.Pswindval
            »    false
 4863  4872 Fmcs_Partition_Data_Pkg.Ops_Time.Hour
            »        1
 4864  4873 Fmcs_Partition_Data_Pkg.Ops_Time.Minute
            »        1
 4865  4874 Fmcs_Partition_Data_Pkg.Ops_Time.Second
            »        1
 4866  4875 Perf_Dpkg.Psnumengout
            »        1
 4867  4876 Perf_Background_Dpkg.Psvgonpath
            »     true
 4868  4877 Perf_Background_Dpkg.Pscrzalt.data
            »     10.0
 4869  4878 Perf_Background_Dpkg.Pscrzalt.Valid
            »    false
 4870  4879 Perf_Background_Dpkg.Psfinaldes
            »    false
 4871  4880 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas
            »    230.0
 4872  4881 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt
            »  15000.0
 4873  4882 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type                                                 Vg_Ext_Tpkg.Clb
            » _Spd_Lim
 4874  4883 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident                                                                   "
            » ABCD   "
 4875  4884 Perf_Background_Dpkg.Pcactorsec
            »   Active
 4876  4885 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
            »    False
 4877  4886 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Ident                                                                    "
            » 1234567"
 4878  4887 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.CAS
            »    120.0
 4879  4888 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.REASON                                                               Retu
            » rntoecon
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 4880   4889 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.AIRBRAKE
             »    false
 4881   4890 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.SPARE1
             »        1
 4882   4891 Perf_Background_Dpkg.Psfirstpass
             »    False
 4883   4892 Perf_Background_Dpkg.Psonofrstpas
             »    False
 4884   4893 Perf_Background_Dpkg.Psftpbwritok
             »    False
 4885   4894 Perf_Background_Dpkg.Pslvlatbcalt
             »     True
 4886   4895 Perf_Integration_Dpkg.Pslvlblwpth
             »     True
 4887   4896 Perf_Background_Dpkg.Psfi_Possble
             »     True
 4888   4897 Perf_Background_Dpkg.On_Icao_Leg_Decel
             »     True
 4889   4898 Perf_Background_Dpkg.Psignorehm
             »     True
 4890   4899 Perf_Integration_Dpkg.Pcoldwspdchg                                                                                 Ica
             » olimited
 4891   4900 Perf_Background_Dpkg.Adc_Fg_Valid
             »    False
 4892   4901 Perf_Background_Dpkg.Psenginesoff
             »     True
 4893   4902 Perf_Dpkg.Pcdelspdrec.Predicted
             »     True
 4894   4903 Perf_Background_Dpkg.Pcoldeconcas.Valid
             »     True
 4895   4904 Prf_Bkgnd_Pkg:body.Fgspdsvalid
             »     True
 4896   4905 Perf_Dpkg.takeoff_gwt.valid
             »     True
 4897   4906 Perf_Dpkg.takeoff_gwt.data
             »    400.0
 4898   4907 Perf_Background_Dpkg.Pcfltphase
             » Approach
 4899   4908 Perf_Dpkg.Pcfirstpred(Active)
             »     True
 4900   4909 Perf_Background_Dpkg.Pcspeedmode                                                                           Perf_Ext_Tp
             » kg.Vmspd
 4901   4910 Guid_Ext_Dpkg.Va3Vertmde                                                                                   Perf_Ext_Tp
             » kg.Vmspd
```

```
4902  4911 Perf_Background_Dpkg.Pcspdtgttag
           »      Cas
4903  4912 Perf_Background_Dpkg.Psspdtarget
           »      0.0
4904  4913 Perf_Background_Dpkg.Psfpatgt
           »      0.0
4905  4914 Perf_Background_Dpkg.Psfpaact
           »    False
4906  4915 Guid_Spds_Dpkg.Vc3prtlimcas
           »      1.0
4907  4916 Perf_Background_Dpkg.Psrtrntocas
           »      0.0
4908  4917 Perf_Background_Dpkg.Pcpredcount(Active)
           »        2
4909  4918 Perf_Dpkg.Psfrstactprd
           »    False
4910  4919 Perf_Background_Dpkg.Pcspdchgtgt.Apply
           »     True
4911  4920 Perf_Background_Dpkg.Psdestqnh.Valid
           »    False
4912  4921 Perf_Background_Dpkg.Pcdestglidx
           »        1
4913  4922 Perf_Background_Dpkg.Pcvertmode                                                                    Perf_Int_Base_Tpkg
           » .Openclb
4914  4923 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
           »     True
4915  4924 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
           »    false
4916  4925 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
           »     True
4917  4926 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
           »     True
4918  4927 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
           »    200.0
4919  4928 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
           »     True
4920  4929 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
           »     True
4921  4930 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Mach_Target
           »      1.0
4922  4931 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Mach_Target
           »     True
4923  4932 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Speed_Target
           »      0.0
```

```
4924  4933  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
            »     True
4925  4934  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
            »     True
4926  4935  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
            »     True
4927  4936  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target
            »     True
4928  4937  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target
            »  57.3066
4929  4938  Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
            »     True
4930  4939  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side1
            »     True
4931  4940  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.PRIM_Cas_Side2
            »     True
4932  4941  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.PRIM_Cas_Side1
            »    150.0
4933  4942  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.PRIM_Cas_Side2
            »    151.0
4934  4943  CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
            »     true
4935  4944  Guid_Spds_Dpkg.Vc3curspds.Fltphase
            » Approach
4936  4945  Perf_Background_Dpkg.Speed_Annunciation.Cas
            »      0.0
4937  4946  Perf_Background_Dpkg.Speed_Annunciation.Alt
            »      0.0
4938  4947  Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type                                                     Vg_Ext_Tpkg
            » .Invalid
4939  4948  Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                                                                    "
            »        "
4940  4949  Perf_Background_Dpkg.Flex_Isadev.Data
            »      5.0
4941  4950
4942  4951
4943  4952   define Puxoveralt_Exec := False
4944  4953
4945  4954
4946  4955  INPUT                                                                                                      VALUE
4947  4956  --------------------------------------------------------------------------------------------------  ------------------
            » --------
4948  4957  Perf_Integration_Dpkg.Pcspdchgident                                                                                  "
            » 7654321"
```

```
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Pslimited
»    false
Perf_Background_Dpkg.Pcpathref
»   Onpath
Perf_Background_Dpkg.Pcspdchgtgt.Apply
»     true
Perf_Background_Dpkg.Pcspdchgtgt.Ident                                                                                 "
» 1111111"
Perf_Background_Dpkg.Pcspdchgtgt.CAS
»      0.0
Perf_Background_Dpkg.Pcspdchgtgt.REASON                                                                              Ica
» olimited
Perf_Background_Dpkg.Pcspdchgtgt.AIRBRAKE
»     true
Perf_Background_Dpkg.Pcspdchgtgt.SPARE1
»        0
Perf_Background_Dpkg.Psdestqnh.Data
»      0.0
Perf_Background_Dpkg.Psvsact
»    false
Perf_Background_Dpkg.Psfpaact
»    false
Computoldtgt
»     True
Curspdsval
»    False


 define Puxoveralt_Exec := True


OUTPUT                                                          EXPECTED               TOLERANCE               ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Psgw                                                  150.0            0.001                   1.5
» 0000E+02  P
Perf_Background_Dpkg.Pcspdtgttag                           Fmcs_Base_Types.Mach            (N/A)
»     MACH  P
Perf_Background_Dpkg.Psspdtarget                                             1.0            0.001                   1.0
» 0000E+00  P
Perf_Background_Dpkg.Pcspdtgttag                        /= Fmcs_Base_Types.Cas            (N/A)
```

```
                 »     MACH  P
 4974   4983 Perf_Background_Dpkg.Psspdtarget                                             1.0          0.001                 1.0
             » 0000E+00  P
 4975   4984 Perf_Background_Dpkg.Pcspdchgtgt.Apply                                     false          (N/A)
             »    FALSE  P
 4976   4985 Perf_Background_Dpkg.Pshmdecel                                             False          (N/A)
             »    FALSE  P
 4977   4986
 4978   4987
 4979   4988  define Puxoveralt_Exec := True
 4980   4989
 4981   4990
 4982   4991 OUTPUT                                                          EXPECTED                TOLERANCE              ACTUAL
             »           P/F
 4983   4992 ---------------------------------------------------  ----------------------------  ------------  ------------------
             » --------  ----
 4984   4993 Perf_Background_Dpkg.Psgw                                                      150.0          0.001                 1.5
             » 0000E+02  P
 4985   4994 Perf_Background_Dpkg.Psdestqnh.Data                                           1013.0          0.001                 1.0
             » 1300E+03  P
 4986   4995 Perf_Background_Dpkg.Pcvertmode                              Perf_Int_Base_Tpkg.Econo          (N/A)
             »    ECONO  P
 4987   4996 Puxoveralt_Exec                                                                 True          (N/A)
             »     TRUE  P
 4988   4997 Perf_Background_Dpkg.Pcspdchgtgt.Apply                                         False          (N/A)
             »    FALSE  P
 4989   4998 Perf_Background_Dpkg.Pcpathref                                           INVALIDPATH          (N/A)                 INV
             » ALIDPATH  P
 4990   4999 Perf_Background_Dpkg.Psgw                                                      150.0          0.001                 1.5
             » 0000E+02  P
 4991   5000 Perf_Background_Dpkg.Pcspeedmode                                 Perf_Ext_Tpkg.Vmecon          (N/A)
             »   VMECON  P
 4992   5001 Perf_Background_Dpkg.Psfpatgt                                                    1.0          0.001                 1.0
             » 0019E+00  P
 4993   5002 Perf_Background_Dpkg.Psfpaact                                                   True          (N/A)
             »     TRUE  P
 4994   5003 Perf_Background_Dpkg.Psvsact                                                 /= True          (N/A)
             »    FALSE  P
 4995   5004 Perf_Background_Dpkg.Pcfltphase                                             Approach          (N/A)
             » APPROACH  P
 4996   5005 Perf_Background_Dpkg.Psautolat                                                  True          (N/A)
             »     TRUE  P
 4997   5006 Perf_Background_Dpkg.Psappspdlat                                                True          (N/A)
             »     TRUE  P
```

```
4998  5007 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                           True          (N/A)
           »     TRUE  P
4999  5008 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                         False          (N/A)
           »    FALSE  P
5000  5009 Perf_Background_Dpkg.Psrtrntocas                                                    1.0          0.001                1.0
           » 0000E+00  P
5001  5010 Perf_Background_Dpkg.Pslimited                                                      True          (N/A)
           »     TRUE  P
5002  5011 Perf_Background_Dpkg.Pcspdchgtgt.Apply                                           /= true          (N/A)
           »    FALSE  P
5003  5012 Perf_Background_Dpkg.Pcspdchgtgt.Ident                                         "1234567"          (N/A)                  "
           » 1234567"  P
5004  5013 Perf_Background_Dpkg.Pcspdchgtgt.CAS                                              120.0          0.001                1.2
           » 0000E+02  P
5005  5014 Perf_Background_Dpkg.Pcspdchgtgt.REASON                                     Returntoecon          (N/A)               RETU
           » RNTOECON  P
5006  5015 Perf_Background_Dpkg.Pcspdchgtgt.AIRBRAKE                                         false          (N/A)
           »    FALSE  P
5007  5016 Perf_Background_Dpkg.Pcspdchgtgt.SPARE1                                               1          (N/A)
           »        1  P
5008  5017 Perf_Integration_Dpkg.Pcspdchgident                                            "1234567"          (N/A)                  "
           » 1234567"  P
5009  5018
5010  5019
5011  5020 ====> All 32 Comparisons Passed <====
5012  5021
5013  5022
5014  5023 TESTID: 30
5015  5024     If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
           » s are on,
5016  5025     the aircraft gross weight shall be set to any one of the following:
5017  5026    - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
           » craft
5018  5027      gross weight and Take Off gross weight being valid
5019  5028    - Aircraft GW from the Performance Weights function,  if the flight phase is other
5020  5029      than takeoff or before, or the aircraft gross weight or the Take Off gross weight
5021  5030      being invalid
5022  5031     The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
5023  5032     PERF_SDD_07501_INT
5024  5033     --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is active,engines ar
           » e off,
5025  5034     --the flight phase is Takeoff,the aircraft gross weight and Take Off gross weight being valid, then Aircraft Takeo
           » ff GW
5026  5035     --from the Performance Weights function
```

```

    If the mach target and the fcu mach selected mode retrieved from IO via Io_Fg_Fm_Internal_Dpkg.Mach_Target are val
» id,
    then the speed target tag and the speed target are not set.
    PERF_SDD_07502_INT
    If the CAS target from IO is valid and the fcu mach selected mode retrieved from IO is valid,
    then the speed target tag and the speed target are not set.
    PERF_SDD_07503_INT
    --In this tese case, the mach target and the CAS target are valid, but the fcu mach selected mode is invalid
    When the FPA mode active and the target retrieved from IO are valid,
    then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
    The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
»  retrieved
    from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
» rom ft/min
    to ft/sec. The flag indicating the vertical speed mode active is set to True.
    PERF_SDD_07504_INT
    --In this test case, the target retrieved from IO are valid but the FPA mode active is not valid(Fpa_Mode_Active.D
» ata= false),
    -- the Vertical Speed mode active and the target retrieved from IO are valid
    The destination QNH data shall be initialized to standard QNH if it is invalid with the destination being defined
    PERF_SDD_07505_INT
   --In this test case, the destination is being defined but the destination QNH data is valid
    If the current itinerary is neither Current Mode Predictions (Normal or High priority)
    nor Pred_to_alt itinerary, then the vertical mode(Pcvertmode) shall be set to Econ mode.
    PERF_SDD_07506(PERF_SRD_6192)
    --In this test case,the current itinerary is Current_Mode_Hi_Pri.
     ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is t
» he first pass
    of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
    PERF_SDD_08225_INT
    --In this test case, only the Flifht phase is Take off, the other are satisfied
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07501_INT, PERF_SDD_07502_INT, PERF_SDD_07503_INT, PERF_SDD_07504_INT,
                                    PERF_SDD_07505_INT, PERF_SDD_07506(PERF_SRD_6192),PERF_SDD_08225_INT
    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                         VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
»     True
```

```
 5063   5072 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
             »     True
 5064   5073 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
             »     True
 5065   5074 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
             »     True
 5066   5075 Perf_Dpkg.Min_Gwt
             »    100.0
 5067   5076 Perf_Dpkg.Max_Gwt
             »    400.0
 5068   5077 Perf_Background_Dpkg.Flight_Plan_Type                                                                               I
             » s_Active
 5069   5078 Perf_Background_Dpkg.Ats_Enable
             »     True
 5070   5079 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »  Takeoff
 5071   5080 Perf_Database_Dpkg.Psmmo
             »     0.45
 5072   5081 Perf_Background_Dpkg.Pszfw
             »    300.0
 5073   5082 Perf_Background_Dpkg.Psblockfuel
             »     50.0
 5074   5083 Perf_Background_Dpkg.Pstaxifuel
             »     25.0
 5075   5084 Perf_Background_Dpkg.Psairborne
             »    False
 5076   5085 Perf_Background_Dpkg.Psautolat
             »     True
 5077   5086 Guid_Ext_Dpkg.Gcxxlatautoc
             »    False
 5078   5087 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
             »    False
 5079   5088 Perf_Background_Dpkg.Psengout
             »     True
 5080   5089 Cdk_Vert_Dpkg:Body.Engine_Out_I
             »    False
 5081   5090 Perf_Background_Dpkg.Pcholdflags.Hmdecel
             »     True
 5082   5091 Perf_Dpkg.Repredict_Hm_Decel
             »     True
 5083   5092 Perf_Background_DPkg.Pshmdecel
             »     True
 5084   5093 Perf_Background_Dpkg.Pcholdflags.Hmactive
             »     True
 5085   5094 Perf_Ads_Dpkg.Fi_Enabled
             »    False
 5086   5095 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
             »    False
 5087   5096 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
             »     True
 5088   5097 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
             »     True
 5089   5098 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
             »     True
 5090   5099 Perf_Background_Dpkg.Pcholdflags.Hmdistval
             »     True
 5091   5100 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
             »     True
 5092   5101 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
             »     True
 5093   5102 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
             »     True
 5094   5103 Perf_Background_Dpkg.Psappspdlat
             »     True
 5095   5104 Perf_Dpkg.Pcengoutprds
             »   Altpln
 5096   5105 Perf_Background_Dpkg.Pcpathref
             »   Onpath
 5097   5106 Guid_Ext_Dpkg.Va3Vertmde                                                                   Perf_Ext_Tp
             » kg.Vmspd
 5098   5107 Perf_Background_DPkg.Pscurcas
             »      5.0
 5099   5108 Perf_Background_DPkg.Pscurmach
             »      5.0
 5100   5109 Perf_Background_DPkg.Pscurtas
             »      5.0
 5101   5110 Perf_Background_Dpkg.Pcitin.Itinerary                                                      Current_Mod
             » e_Hi_Pri
 5102   5111 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 5103   5112 Perf_Background_Dpkg.Pstogwtval
             »     True
 5104   5113 Perf_Background_Dpkg.Pstogwt
             »     50.0
 5105   5114 Perf_Background_Dpkg.Pcgwind
             »    valid
 5106   5115 Perf_Background_Dpkg.Psgw
             »      0.0
 5107   5116 Perf_Dpkg.Gross_Weight.Status
             »    valid
 5108   5117 Perf_Dpkg.Gross_Weight.Data
             »    150.0
 5109   5118 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 5110   5119 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »    False
 5111   5120 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
             »   9000.0
 5112   5121 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
             »    200.0
 5113   5122 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »    False
 5114   5123 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 5115   5124 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 5116   5125 Perf_Background_Dpkg.Psstpclbact
             »     True
 5117   5126 Perf_Background_Dpkg.Psstpdesact
             »     True
 5118   5127 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
 5119   5128 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »      0.0
 5120   5129 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
             »     0.65
 5121   5130 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
 5122   5131 Perf_Background_Dpkg.Pccuraltcstr.Valid
             »     True
 5123   5132 Perf_Background_Dpkg.Pcprebcalt.Valid
             »     True
 5124   5133 Perf_Background_Dpkg.Pcgmttime.Hour
             »        2
 5125   5134 Perf_Background_Dpkg.Pcgmttime.Minute
             »        2
 5126   5135 Perf_Background_Dpkg.Pcgmttime.Second
             »        2
 5127   5136 Perf_Background_Dpkg.Psinertvs
             »      5.0
 5128   5137 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
             »        0
 5129   5138 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
             »        2
 5130   5139 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
             »        0
 5131   5140 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
             »        2
 5132   5141 Perf_Ads_Dpkg.Pr_Enabled
             »    False
 5133   5142 ATC_DISCRETES_PKG:body.Adson_Flag
             »    False
 5134   5143 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
             »     true
 5135   5144 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
             »     true
 5136   5145 ^Noise_End_Alt_Status                                                                                     Takeoff_Alt_Type
             » s.Active
 5137   5146 ^Noise_Speed_Val
             »     True
 5138   5147 ^Noise_TSPD.valid
             »     True
 5139   5148 ^Noise_TSPD.Data
             »    150.0
 5140   5149 ^Noise_End_Alt
             »    300.0
 5141   5150 ^Noise_Speed
             »    250.0
 5142   5151 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
             »     True
 5143   5152 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
             »     True
 5144   5153 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
             »     21.0
 5145   5154 Perf_Background_Dpkg.Psorgalt
             »  36080.0
 5146   5155 Perf_Background_Dpkg.Noise_Data.Altitude.Data
             »      0.0
 5147   5156 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
             »    False
 5148   5157 Perf_Background_Dpkg.Noise_Data.Speed.Data
             »      0.0
 5149   5158 Perf_Background_Dpkg.Noise_Data.Speed.Valid
             »    False
 5150   5159 Perf_Background_Dpkg.Noise_Data.Tspd.Data
             »      0.0
 5151  5160 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
            »    False
 5152  5161 Perf_Background_Dpkg.Psacalt
            »     50.0
 5153  5162 Perf_Background_Dpkg.Psacaltv
            »     True
 5154  5163 Perf_Background_Dpkg.Pstruetrkv
            »     True
 5155  5164 Perf_Background_Dpkg.Psvgrnd
            »      1.0
 5156  5165 Perf_Background_Dpkg.Psvgrndval
            »     True
 5157  5166 Perf_Background_Dpkg.Pcacposn.Data.Lat
            »    100.0
 5158  5167 Perf_Background_Dpkg.Pcacposn.Data.Lon
            »    100.0
 5159  5168 Perf_Background_Dpkg.Pcacposn.Valid
            »    false
 5160  5169 Perf_Background_Dpkg.Pstruetrack
            »      0.2
 5161  5170 Perf_Background_Dpkg.Pswindbrg
            »    150.0
 5162  5171 Perf_Background_Dpkg.Pswindmag
            »    130.0
 5163  5172 Perf_Background_Dpkg.Pswindval
            »    false
 5164  5173 Fmcs_Partition_Data_Pkg.Ops_Time.Hour
            »        1
 5165  5174 Fmcs_Partition_Data_Pkg.Ops_Time.Minute
            »        1
 5166  5175 Fmcs_Partition_Data_Pkg.Ops_Time.Second
            »        1
 5167  5176 Perf_Dpkg.Psnumengout
            »        1
 5168  5177 Perf_Background_Dpkg.Psvgonpath
            »     true
 5169  5178 Perf_Background_Dpkg.Pscrzalt.data
            »     10.0
 5170  5179 Perf_Background_Dpkg.Pscrzalt.Valid
            »    false
 5171  5180 Perf_Background_Dpkg.Psfinaldes
            »    false
 5172  5181 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas
            »    230.0
```

```
5173  5182 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt
           »  15000.0
5174  5183 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type                                                 Vg_Ext_Tpkg.Clb
           » _Spd_Lim
5175  5184 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident                                                                    "
           » ABCD   "
5176  5185 Perf_Background_Dpkg.Pcactorsec
           »   Active
5177  5186 Perf_Dpkg.Pcfirstpred(Active)
           »     true
5178  5187 Perf_Background_Dpkg.Psenginesoff
           »     True
5179  5188 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »    0.011
5180  5189 Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid
           »     True
5181  5190 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    10.01
5182  5191 Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid
           »     True
5183  5192 Perf_Background_Dpkg.Psfirstpass
           »    False
5184  5193 Perf_Background_Dpkg.Psonofrstpas
           »    False
5185  5194 Perf_Background_Dpkg.Psftpbwritok
           »    False
5186  5195 Perf_Background_Dpkg.Pslvlatbcalt
           »     True
5187  5196 Perf_Integration_Dpkg.Pslvlblwpth
           »     True
5188  5197 Perf_Background_Dpkg.Psfi_Possble
           »     True
5189  5198 Perf_Background_Dpkg.On_Icao_Leg_Decel
           »     True
5190  5199 Perf_Background_Dpkg.Psignorehm
           »     True
5191  5200 Perf_Integration_Dpkg.Pcoldwspdchg                                                                            Ica
           » olimited
5192  5201 Perf_Background_Dpkg.Adc_Fg_Valid
           »    False
5193  5202 Perf_Dpkg.Pcdelspdrec.Predicted
           »     True
5194  5203 Perf_Background_Dpkg.Pcoldeconcas.Valid
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 5195  5204 Perf_Dpkg.takeoff_gwt.valid
            »     true
 5196  5205 Perf_Dpkg.takeoff_gwt.data
            »    410.0
 5197  5206 Perf_Background_Dpkg.Pcspdtgttag
            »      Cas
 5198  5207 Perf_Background_Dpkg.Psspdtarget
            »      0.0
 5199  5208 Perf_Background_Dpkg.Psfpatgt
            »      0.0
 5200  5209 Perf_Background_Dpkg.Psfpaact
            »    False
 5201  5210 Perf_Integration_Dpkg.Psvstgt
            »      0.0
 5202  5211 Perf_Background_Dpkg.Psvsact
            »    False
 5203  5212 Perf_Background_Dpkg.Psdestqnh.Valid
            »     True
 5204  5213 Perf_Background_Dpkg.Pcdestglidx
            »        1
 5205  5214 Perf_Background_Dpkg.Psdestqnh.Data
            »      0.0
 5206  5215 Perf_Background_Dpkg.Pcvertmode                                                                   Perf_Int_Base_Tpkg
            » .Openclb
 5207  5216 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
            »     true
 5208  5217 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
            »    False
 5209  5218 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Mach_Target
            »      1.0
 5210  5219 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Mach_Target
            »     True
 5211  5220 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Speed_Target
            »      1.0
 5212  5221 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
            »     True
 5213  5222 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
            »     True
 5214  5223 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
            »    False
 5215  5224 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target
            »     True
 5216  5225 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target
            »     49.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
5217  5226 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active
           »     True
5218  5227 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target
           »     True
5219  5228 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target
           »     60.0
5220  5229 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
           »     True
5221  5230 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
           »     true
5222  5231 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
           »     True
5223  5232 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
           »     True
5224  5233 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
           »    20000
5225  5234 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
           »     79.0
5226  5235 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
           »     60.0
5227  5236 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
           »      0.5
5228  5237 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas
           »     49.0
5229  5238 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
           »     true
5230  5239 CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt
           »  25001.1
5231  5240 Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt
           »  25001.0
5232  5241 Guid_Spds_Dpkg.Vc3curspds.Fltphase
           »  Takeoff
5233  5242 Perf_Background_Dpkg.Speed_Annunciation.Cas
           »      0.0
5234  5243 Perf_Background_Dpkg.Speed_Annunciation.Alt
           »      0.0
5235  5244 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type                                                   Vg_Ext_Tpkg
           » .Invalid
5236  5245 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                                                                  "
           »        "
5237  5246 Perf_Background_Dpkg.Flex_Isadev.Data
           »      5.0
5238  5247 Perf_Background_Dpkg.Psvsact
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
Perf_Background_Dpkg.Psfpaact
»     True
Perf_Background_Dpkg.Pcspeedmode                                                                          Perf_Ext_Tpk
» g.Vmnone
Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt
»      0.0
Computoldtgt
»     True
Curspdsval
»    False


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Psgw                                                     410.0          0.001                 4.1
» 0000E+02  P
Perf_Background_Dpkg.Pcspdtgttag                            /= Fmcs_Base_Types.Mach          (N/A)
»      CAS  P
Perf_Background_Dpkg.Psspdtarget                                             /= 1.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pcspdtgttag                                                Cas          (N/A)
»      CAS  P
Perf_Background_Dpkg.Psspdtarget                                                1.0          0.001                 1.0
» 0000E+00  P
Perf_Background_Dpkg.Psdestqnh.Data                                       /= 1013.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pcvertmode                         /= Perf_Int_Base_Tpkg.Econo          (N/A)
»  OPENCLB  P
Perf_Background_Dpkg.Psgw                                                     400.0          0.001                 4.0
» 0000E+02  P
Perf_Background_Dpkg.Psfpaact                                               /= True          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Psvsact                                                   True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Psfpatgt                                               /= 0.86          0.001                 0.0
» 0000E+00  P
Perf_Integration_Dpkg.Psvstgt                                                   1.0          0.001                 1.0
» 0000E+00  P
Perf_Background_Dpkg.Pcspeedmode                            /= Perf_Ext_Tpkg.Vmecon          (N/A)
»    VMSPD  P


```

```
====> All 13 Comparisons Passed <====


TESTID: 31

    When the flight phase is Descent, the descent path reference shall be set to
    the guidance descent path reference(Va3pathref).
    PERF_SDD_07500_INT

    If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
» s are on,
    the aircraft gross weight shall be set to any one of the following:
   - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
» craft
     gross weight and Take Off gross weight being valid
   - Aircraft GW from the Performance Weights function,  if the flight phase is other
     than takeoff or before, or the aircraft gross weight or the Take Off gross weight
     being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT
    --In this test case,the current itinerary is Fuel_Plan_Fpln_Preds,the aircraft gross weight not be set.

    If the mach target and the fcu mach selected mode retrieved from IO via Io_Fg_Fm_Internal_Dpkg.Mach_Target are inv
» alid,
    then the speed target tag shall not be set to indicate Mach and the speed target is not set the value of mach targ
» et.
    PERF_SDD_07502_INT (Here do robust testing of PERF_SDD_07502_INT)
    If the CAS target from IO is valid and the fcu mach selected mode retrieved from IO is invalid,
    then the speed target tag shall not be set to indicate CAS and the speed target is not set the value of CAS target
» .
    PERF_SDD_07503_INT (Here do robust testing of PERF_SDD_07503_INT)
   --In this test case, the mach target and the CAS target are invalid(negative case)
    When the FPA mode active and the target retrieved from IO are valid,
    then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
    The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
»  retrieved
    from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
» rom ft/min
    to ft/sec. The flag indicating the vertical speed mode active is set to True.
    --In this test case, the Fpa_Mode_Active.Valid and Vspd_Mode_Active.Valid is false
    PERF_SDD_07504_INT (Here do robust testing of PERF_SDD_07504_INT)

    ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is th
» e first pass
```

```
5299  5308     of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
5300  5309     PERF_SDD_08225_INT
5301  5310     --In this test case, all the condition are true and FLIGHT PHASE is descent
5302  5311     During descent or approach with current target speeds from FG are valid, ECON CAS limited by speed constraint othe
            » r than
5303  5312     speed limit shall be set to current CAS speed if partially limited managed speed target is zero else it is set to
5304  5313     partially limited managed speed target.
5305  5314     PERF_SDD_07540
5306  5315     --In this test case, current target speeds from FG are valid, and partially limited managed speed target is zero
5307  5316     During descent or approach with current target speeds from FG are valid, if speed limit or ICAO limit is latched i
            » n descent
5308  5317     then ECON/LRC (based on the selected flight criterion), CAS limited flag shall be set to true.
5309  5318     PERF_SDD_08227_INT
5310  5319     --In this test case,current target speeds from FG are valid, speed limit is false, ICAO limit is true
5311  5320     If current target speeds from FG are valid, then the speed change target restriction record from VG is copied to P
            » erf and
5312  5321     the speed change apply flag shall be set if the aircraft is in the deceleration zone to HM.
5313  5322     PERF_SDD_07542_INT
5314  5323     --In this test case, current target speeds from FG are valid, and the aircraft is in the deceleration zone
5315  5324
5316  5325     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07501_INT, PERF_SDD_07502_INT, PERF_SDD_07503_INT, PERF_SDD_07504_INT,
5317  5326                                     PERF_SDD_07540, PERF_SDD_08227_INT, PERF_SDD_08225_INT
5318  5327                                     PERF_SDD_07542_INT, PERF_SDD_07500_INT
5319  5328     SUPPORTING REQUIREMENTS : N/A
5320  5329
5321  5330
5322  5331 INPUT                                                                                                  VALUE
5323  5332 -------------------------------------------------------------------------------------------------  ------------------
            » --------
5324  5333 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
            »     True
5325  5334 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
            »     True
5326  5335 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
            »     True
5327  5336 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
            »     True
5328  5337 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
            »     True
5329  5338 Perf_Dpkg.Min_Gwt
            »    100.0
5330  5339 Perf_Dpkg.Max_Gwt
            »    400.0
5331  5340 Perf_Background_Dpkg.Flight_Plan_Type                                                                     I
```

```
            » s_Active
 5332  5341 Perf_Background_Dpkg.Ats_Enable
            »     True
 5333  5342 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
            »  Descent
 5334  5343 Perf_Database_Dpkg.Psmmo
            »     0.45
 5335  5344 Perf_Background_Dpkg.Pszfw
            »    300.0
 5336  5345 Perf_Background_Dpkg.Psblockfuel
            »     50.0
 5337  5346 Perf_Background_Dpkg.Pstaxifuel
            »     25.0
 5338  5347 Perf_Background_Dpkg.Psairborne
            »    False
 5339  5348 Perf_Background_Dpkg.Psautolat
            »     True
 5340  5349 Guid_Ext_Dpkg.Gcxxlatautoc
            »    False
 5341  5350 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
            »    False
 5342  5351 Perf_Background_Dpkg.Psengout
            »     True
 5343  5352 Cdk_Vert_Dpkg:Body.Engine_Out_I
            »    False
 5344  5353 Perf_Background_Dpkg.Pcholdflags.Hmdecel
            »     True
 5345  5354 Guid_Checkpoint_Resynch_Dpkg.Va3holdflags.Hmdecel
            »     True
 5346  5355 Perf_Dpkg.Pshmdeleted
            »    false
 5347  5356 Perf_Dpkg.Repredict_Hm_Decel
            »     True
 5348  5357 Perf_Background_DPkg.Pshmdecel
            »     True
 5349  5358 Perf_Background_Dpkg.Pcholdflags.Hmactive
            »     True
 5350  5359 Perf_Ads_Dpkg.Fi_Enabled
            »    False
 5351  5360 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
            »    False
 5352  5361 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
            »     True
 5353  5362 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
           »     True
 5354  5363 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
 5355  5364 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
 5356  5365 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
 5357  5366 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
 5358  5367 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
           »    False
 5359  5368 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
           »     True
 5360  5369 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
 5361  5370 Perf_Background_Dpkg.Psappspdlat
           »     True
 5362  5371 Perf_Dpkg.Pcengoutprds
           »   Altpln
 5363  5372 Perf_Background_Dpkg.Pcpathref
           »   Onpath
 5364  5373 Guid_Ext_Dpkg.Va3Vertmde                                                                                            Perf_Ext_Tp
           » kg.Vmspd
 5365  5374 Perf_Background_DPkg.Pscurcas
           »      5.0
 5366  5375 Perf_Background_DPkg.Pscurmach
           »      5.0
 5367  5376 Perf_Background_DPkg.Pscurtas
           »      5.0
 5368  5377 Perf_Background_Dpkg.Pcitin.Itinerary                                                                                Fuel_Plan_Fp
           » ln_Preds
 5369  5378 Perf_Background_Dpkg.Pcactorsec
           »   Active
 5370  5379 Perf_Dpkg.Pcfirstpred(Active)
           »     True
 5371  5380 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     True
 5372  5381 Perf_Background_Dpkg.Pstogwtval
           »    False
 5373  5382 Perf_Background_Dpkg.Pstogwt
           »     50.0
 5374  5383 Perf_Background_Dpkg.Pcgwind
           »  Invalid
 5375  5384 Perf_Background_Dpkg.Psgw
```

```
              »      0.0
 5376   5385 Perf_Dpkg.Gross_Weight.Status
              »    Valid
 5377   5386 Perf_Dpkg.Gross_Weight.Data
              »    150.0
 5378   5387 Perf_Integration_DPkg.Pcairbrakes
              »   Fullab
 5379   5388 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
              »    False
 5380   5389 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
              »   9000.0
 5381   5390 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
              »    200.0
 5382   5391 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
              »    False
 5383   5392 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
              »    265.0
 5384   5393 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
              »     0.55
 5385   5394 Perf_Background_Dpkg.Psstpclbact
              »     True
 5386   5395 Perf_Background_Dpkg.Psstpdesact
              »     True
 5387   5396 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
              »      0.0
 5388   5397 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
              »      0.0
 5389   5398 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
              »    0.011
 5390   5399 Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid
              »     True
 5391   5400 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
              »    10.01
 5392   5401 Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid
              »    False
 5393   5402 Perf_Background_Dpkg.Pccuraltcstr.Valid
              »     True
 5394   5403 Perf_Background_Dpkg.Pcprebcalt.Valid
              »     True
 5395   5404 Perf_Background_Dpkg.Pcgmttime.Hour
              »        2
 5396   5405 Perf_Background_Dpkg.Pcgmttime.Minute
              »        2
 5397   5406 Perf_Background_Dpkg.Pcgmttime.Second
```

```
                 »        2
 5398   5407 Perf_Background_Dpkg.Psinertvs
                 »      5.0
 5399   5408 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
                 »        0
 5400   5409 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
                 »        2
 5401   5410 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
                 »        0
 5402   5411 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
                 »        2
 5403   5412 Perf_Ads_Dpkg.Pr_Enabled
                 »    False
 5404   5413 ATC_DISCRETES_PKG:body.Adson_Flag
                 »    False
 5405   5414 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
                 »     true
 5406   5415 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
                 »     true
 5407   5416 ^Noise_End_Alt_Status                                                                                          Takeoff_Alt_Type
                 » s.Active
 5408   5417 ^Noise_Speed_Val
                 »     True
 5409   5418 ^Noise_TSPD.valid
                 »     True
 5410   5419 ^Noise_TSPD.Data
                 »    150.0
 5411   5420 ^Noise_End_Alt
                 »    300.0
 5412   5421 ^Noise_Speed
                 »    250.0
 5413   5422 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
                 »     True
 5414   5423 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
                 »     True
 5415   5424 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
                 »     21.0
 5416   5425 Perf_Background_Dpkg.Psorgalt
                 »  36080.0
 5417   5426 Perf_Background_Dpkg.Noise_Data.Altitude.Data
                 »      0.0
 5418   5427 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
                 »    False
 5419   5428 Perf_Background_Dpkg.Noise_Data.Speed.Data
```

```
                »      0.0
 5420   5429 Perf_Background_Dpkg.Noise_Data.Speed.Valid
                »    False
 5421   5430 Perf_Background_Dpkg.Noise_Data.Tspd.Data
                »      0.0
 5422   5431 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
                »    False
 5423   5432 Perf_Background_Dpkg.Pcfltphase
                »  Takeoff
 5424   5433 Perf_Background_Dpkg.Psacalt
                »     50.0
 5425   5434 Perf_Background_Dpkg.Psacaltv
                »     True
 5426   5435 Perf_Background_Dpkg.Pstruetrkv
                »     True
 5427   5436 Perf_Background_Dpkg.Psvgrnd
                »      1.0
 5428   5437 Perf_Background_Dpkg.Psvgrndval
                »     True
 5429   5438 Perf_Background_Dpkg.Pcacposn.Data.Lat
                »    100.0
 5430   5439 Perf_Background_Dpkg.Pcacposn.Data.Lon
                »    100.0
 5431   5440 Perf_Background_Dpkg.Pcacposn.Valid
                »    false
 5432   5441 Perf_Background_Dpkg.Pstruetrack
                »      0.2
 5433   5442 Perf_Background_Dpkg.Pswindbrg
                »    150.0
 5434   5443 Perf_Background_Dpkg.Pswindmag
                »    130.0
 5435   5444 Perf_Background_Dpkg.Pswindval
                »    false
 5436   5445 Fmcs_Partition_Data_Pkg.Ops_Time.Hour
                »        1
 5437   5446 Fmcs_Partition_Data_Pkg.Ops_Time.Minute
                »        1
 5438   5447 Fmcs_Partition_Data_Pkg.Ops_Time.Second
                »        1
 5439   5448 Perf_Dpkg.Psnumengout
                »        1
 5440   5449 Perf_Background_Dpkg.Psvgonpath
                »     true
 5441   5450 Perf_Background_Dpkg.Pscrzalt.data
```

```
            »     10.0
 5442  5451 Perf_Background_Dpkg.Pscrzalt.Valid
            »    false
 5443  5452 Perf_Background_Dpkg.Psfinaldes
            »    false
 5444  5453 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas
            »    230.0
 5445  5454 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt
            »  15000.0
 5446  5455 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type                                      Vg_Ext_Tpkg.Clb
            » _Spd_Lim
 5447  5456 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident                                                           "
            » ABCD   "
 5448  5457 Perf_Background_Dpkg.Psfirstpass
            »    False
 5449  5458 Perf_Background_Dpkg.Psonofrstpas
            »    False
 5450  5459 Perf_Background_Dpkg.Psftpbwritok
            »    False
 5451  5460 Perf_Background_Dpkg.Psvsact
            »     True
 5452  5461 Perf_Background_Dpkg.Psfpaact
            »     True
 5453  5462 Perf_Background_Dpkg.Pslvlatbcalt
            »     True
 5454  5463 Perf_Integration_Dpkg.Pslvlblwpth
            »     True
 5455  5464 Perf_Background_Dpkg.Psfi_Possble
            »     True
 5456  5465 Perf_Background_Dpkg.On_Icao_Leg_Decel
            »     True
 5457  5466 Perf_Background_Dpkg.Psignorehm
            »     True
 5458  5467 Perf_Integration_Dpkg.Pcoldwspdchg                                                                       Ica
            » olimited
 5459  5468 Perf_Background_Dpkg.Adc_Fg_Valid
            »    False
 5460  5469 Perf_Dpkg.Pcdelspdrec.Predicted
            »     True
 5461  5470 Perf_Background_Dpkg.Pcoldeconcas.Valid
            »     True
 5462  5471 Prf_Bkgnd_Pkg:body.Fgspdsvalid
            »     True
 5463  5472 Perf_Dpkg.takeoff_gwt.valid
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
              »     True
5464   5473   Perf_Dpkg.takeoff_gwt.data
              »    400.0
5465   5474   Perf_Background_Dpkg.Psenginesoff
              »     True
5466   5475   Perf_Background_Dpkg.Pcspdtgttag
              »      Cas
5467   5476   Perf_Background_Dpkg.Psspdtarget
              »      0.0
5468   5477   Perf_Background_Dpkg.Psfpatgt
              »      0.0
5469   5478   Perf_Background_Dpkg.Psfpaact
              »    False
5470   5479   Perf_Integration_Dpkg.Psvstgt
              »      0.0
5471   5480   Perf_Background_Dpkg.Psvsact
              »    False
5472   5481   Guid_Spds_Dpkg.Vc3prtlimcas
              »      0.0
5473   5482   Perf_Background_Dpkg.Psrtrntocas
              »      0.0
5474   5483   Perf_Background_Dpkg.Pcspdchgtgt.Apply
              »     True
5475   5484   Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
              »    False
5476   5485   Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Ident                                                                      "
              » 1234567"
5477   5486   Perf_Integration_Dpkg.Pcspdchgident                                                                                  "
              » 7654321"
5478   5487   Perf_Background_Dpkg.Psdestqnh.Valid
              »    False
5479   5488   Perf_Background_Dpkg.Pcdestglidx
              »        0
5480   5489   Perf_Background_Dpkg.Psdestqnh.Data
              »      0.0
5481   5490   Perf_Background_Dpkg.Pcvertmode                                                                     Perf_Int_Base_Tpkg
              » .Openclb
5482   5491   Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
              »     True
5483   5492   Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
              »     true
5484   5493   Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
              »     true
5485   5494   Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
                »    false
 5486   5495 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
                »     true
 5487   5496 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Mach_Target
                »    False
 5488   5497 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Mach_Target
                »      1.0
 5489   5498 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Speed_Target
                »      1.0
 5490   5499 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
                »    False
 5491   5500 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
                »    False
 5492   5501 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
                »     true
 5493   5502 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target
                »     True
 5494   5503 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target
                »  57.3066
 5495   5504 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active
                »     True
 5496   5505 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target
                »     True
 5497   5506 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target
                »     60.0
 5498   5507 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
                »     true
 5499   5508 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
                »     true
 5500   5509 Perf_Background_Dpkg.Speed_Annunciation.Cas
                »      0.0
 5501   5510 Perf_Background_Dpkg.Speed_Annunciation.Alt
                »      0.0
 5502   5511 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type                                                        Vg_Ext_Tpkg
                » .Invalid
 5503   5512 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                                                                       "
                »        "
 5504   5513 Perf_Background_Dpkg.Flex_Isadev.Data
                »      5.0
 5505   5514 Perf_Background_Dpkg.Pslimited
                »    false
 5506   5515 Perf_Background_Dpkg.Pcspeedmode                                                                              Perf_Ext_Tpk
                » g.Vmnone
 5507   5516 Perf_Background_Dpkg.Psrtrntocas
```

```
            »      0.0
5508  5517  Computoldtgt
            »     True
5509  5518  Curspdsval
            »    False
5510  5519  Xoveralt
            »      0.0
5511  5520  
5512  5521  
5513  5522  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
5514  5523  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
5515  5524  Perf_Background_Dpkg.Psgw                                                       0.0          0.001                 0.0
            » 0000E+00  P
5516  5525  Perf_Background_Dpkg.Pcspdtgttag                            /= Fmcs_Base_Types.Mach          (N/A)
            »      CAS  P
5517  5526  Perf_Background_Dpkg.Psspdtarget                                             /= 1.0          0.001                 0.0
            » 0000E+00  P
5518  5527  Perf_Background_Dpkg.Psspdtarget                                             /= 1.0          0.001                 0.0
            » 0000E+00  P
5519  5528  Perf_Background_Dpkg.Pcspdtgttag                                                Cas          (N/A)
            »      CAS  P
5520  5529  Perf_Background_Dpkg.Pcspdchgtgt.Apply                                        False          (N/A)
            »    FALSE  P
5521  5530  Perf_Integration_Dpkg.Pcspdchgident                                       "1234567"          (N/A)                   "
            » 1234567"  P
5522  5531  Perf_Background_Dpkg.Pshmdecel                                                 True          (N/A)
            »     TRUE  P
5523  5532  Perf_Background_Dpkg.Pcvertmode                            Perf_Int_Base_Tpkg.Econo          (N/A)
            »    ECONO  P
5524  5533  Perf_Background_Dpkg.Psfpatgt                                                /= 1.0          0.001                 0.0
            » 0000E+00  P
5525  5534  Perf_Background_Dpkg.Psfpaact                                               /= True          (N/A)
            »    FALSE  P
5526  5535  Perf_Integration_Dpkg.Psvstgt                                                /= 1.0          0.001                 0.0
            » 0000E+00  P
5527  5536  Perf_Background_Dpkg.Psvsact                                                /= true          (N/A)
            »    FALSE  P
5528  5537  Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                      False          (N/A)
            »    FALSE  P
5529  5538  Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                      True          (N/A)
            »     TRUE  P
5530  5539  Perf_Background_Dpkg.Psrtrntocas                                              10.01          0.001                 1.0
```

```
            » 0100E+01  P
 5531  5540 Perf_Background_Dpkg.Pslimited                                               True          (N/A)
            »     TRUE  P
 5532  5541 Perf_Background_Dpkg.Pcspdchgtgt.Apply                                       True          (N/A)
            »     TRUE  P
 5533  5542 Perf_Background_Dpkg.Pcspeedmode                             Perf_Ext_Tpkg.Vmecon          (N/A)
            »   VMECON  P
 5534  5543
 5535  5544
 5536  5545 ====> All 19 Comparisons Passed <====
 5537  5546
 5538  5547
 5539  5548 TESTID: 32
 5540  5549     If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
            » s are on,
 5541  5550     the aircraft gross weight shall be set to any one of the following:
 5542  5551    - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
            » craft
 5543  5552      gross weight and Take Off gross weight being valid
 5544  5553    - Aircraft GW from the Performance Weights function,  if the flight phase is other
 5545  5554      than takeoff or before, or the aircraft gross weight or the Take Off gross weight
 5546  5555      being invalid
 5547  5556     The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
 5548  5557     PERF_SDD_07501_INT
 5549  5558     --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is Secondary,and eng
            » ines are off,
 5550  5559
 5551  5560     The destination QNH data shall be initialized to standard QNH if it is invalid with the destination being defined
 5552  5561     PERF_SDD_07505_INT
 5553  5562     --In this test case, The destination QNH data is invalid but the destination not being defined
 5554  5563     If the current itinerary is neither Current Mode Predictions (Normal or High priority)
 5555  5564     nor Pred_to_alt itinerary, then the vertical mode(Pcvertmode) shall be set to Econ mode.
 5556  5565     PERF_SDD_07506(PERF_SRD_6192)
 5557  5566     --In this test case,the current itinerary is Current_Mode_Preds
 5558  5567
 5559  5568     ECON or LRC speeds (based on the selected Flight Criterion) shall be used during descent or approach if this is th
            » e first pass
 5560  5569     of Predictions after a flight plan change for the current working flight plan & manual speed mode is set.
 5561  5570     PERF_SDD_08225_INT
 5562  5571     --In this test case, this is the first pass and flight phase is descent but it is not manual speed mode,
 5563  5572     During descent or approach with current target speeds from FG are valid, if speed limit or ICAO limit is latched i
            » n descent
 5564  5573     then ECON/LRC (based on the selected flight criterion), CAS limited flag shall be set to true.
 5565  5574     PERF_SDD_08227_INT
```

```
5566  5575     --In this test case, current target speeds from FG is valid During descent, speed limit and ICAO limit are all fal
             » se
5567  5576     Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
5568  5577     are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
             » d to FL250.
5569  5578     PERF_SDD_07543_INT
5570  5579     --in this test case, only Guid_Spds_Dpkg.Vc3Curspds.Cas.Data leaa than the lower limits, the other are satisfied
5571  5580     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07505_INT,PERF_SDD_07506(PERF_SRD_6192), PERF_SDD_08225_INT,PERF_SDD_0822
             » 7_INT,
5572  5581                                     PERF_SDD_07543_INT,PERF_SDD_07501_INT
5573  5582     SUPPORTING REQUIREMENTS : N/A
5574  5583
5575  5584
5576  5585 INPUT                                                                                                       VALUE
5577  5586 -----------------------------------------------------------------------------------------------------------  ------------------
             » --------
5578  5587 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
             »     True
5579  5588 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
             »     True
5580  5589 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
             »     True
5581  5590 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
             »     True
5582  5591 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
             »     True
5583  5592 Perf_Dpkg.Min_Gwt
             »    100.0
5584  5593 Perf_Dpkg.Max_Gwt
             »    400.0
5585  5594 Perf_Background_Dpkg.Flight_Plan_Type                                                                          I
             » s_Active
5586  5595 Perf_Background_Dpkg.Ats_Enable
             »     True
5587  5596 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »  Descent
5588  5597 Perf_Database_Dpkg.Psmmo
             »     0.45
5589  5598 Perf_Background_Dpkg.Pszfw
             »    300.0
5590  5599 Perf_Background_Dpkg.Psblockfuel
             »     50.0
5591  5600 Perf_Background_Dpkg.Pstaxifuel
             »     25.0
```

```
 5592   5601 Perf_Background_Dpkg.Psairborne
             »    False
 5593   5602 Perf_Background_Dpkg.Psautolat
             »     True
 5594   5603 Guid_Ext_Dpkg.Gcxxlatautoc
             »    False
 5595   5604 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
             »    False
 5596   5605 Perf_Background_Dpkg.Psengout
             »     True
 5597   5606 Cdk_Vert_Dpkg:Body.Engine_Out_I
             »    False
 5598   5607 Perf_Background_Dpkg.Pcholdflags.Hmdecel
             »     True
 5599   5608 Perf_Dpkg.Repredict_Hm_Decel
             »     True
 5600   5609 Perf_Background_DPkg.Pshmdecel
             »     True
 5601   5610 Perf_Background_Dpkg.Pcholdflags.Hmactive
             »     True
 5602   5611 Perf_Ads_Dpkg.Fi_Enabled
             »    False
 5603   5612 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
             »    False
 5604   5613 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
             »     True
 5605   5614 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
             »     True
 5606   5615 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
             »     True
 5607   5616 Perf_Background_Dpkg.Pcholdflags.Hmdistval
             »     True
 5608   5617 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
             »     True
 5609   5618 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
             »     True
 5610   5619 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
             »     True
 5611   5620 Perf_Background_Dpkg.Psappspdlat
             »     True
 5612   5621 Perf_Dpkg.Pcengoutprds
             »   Altpln
 5613   5622 Perf_Background_Dpkg.Pcpathref
             »   Onpath
 5614  5623 Guid_Ext_Dpkg.Va3Vertmde                                                                 Perf_Ext_Tpkg
            » .Vmexped
 5615  5624 Perf_Background_DPkg.Pscurcas
            »      5.0
 5616  5625 Perf_Background_DPkg.Pscurmach
            »      5.0
 5617  5626 Perf_Background_DPkg.Pscurtas
            »      5.0
 5618  5627 Perf_Background_Dpkg.Pcitin.Itinerary                                                       Current_Mo
            » de_Preds
 5619  5628 Perf_Despath_Dpkg.Pcdespath.Vgavalid
            »     True
 5620  5629 Perf_Background_Dpkg.Pstogwtval
            »    False
 5621  5630 Perf_Background_Dpkg.Pstogwt
            »     50.0
 5622  5631 Perf_Background_Dpkg.Pcgwind
            »  Invalid
 5623  5632 Perf_Background_Dpkg.Psgw
            »      0.0
 5624  5633 Perf_Dpkg.Gross_Weight.Status
            »  Invalid
 5625  5634 Perf_Dpkg.Gross_Weight.Data
            »    150.0
 5626  5635 Perf_Integration_DPkg.Pcairbrakes
            »   Fullab
 5627  5636 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
            »    False
 5628  5637 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
            »   9000.0
 5629  5638 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
            »    200.0
 5630  5639 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
            »    False
 5631  5640 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
            »    265.0
 5632  5641 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
            »     0.55
 5633  5642 Perf_Background_Dpkg.Psstpclbact
            »     True
 5634  5643 Perf_Background_Dpkg.Psstpdesact
            »     True
 5635  5644 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
            »      0.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 5636   5645 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »      0.0
 5637   5646 Perf_Background_Dpkg.Pccuraltcstr.Valid
             »     True
 5638   5647 Perf_Background_Dpkg.Pcprebcalt.Valid
             »     True
 5639   5648 Perf_Background_Dpkg.Pcgmttime.Hour
             »        2
 5640   5649 Perf_Background_Dpkg.Pcgmttime.Minute
             »        2
 5641   5650 Perf_Background_Dpkg.Pcgmttime.Second
             »        2
 5642   5651 Perf_Background_Dpkg.Psinertvs
             »      5.0
 5643   5652 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
             »        0
 5644   5653 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
             »        2
 5645   5654 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
             »        0
 5646   5655 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
             »        2
 5647   5656 Perf_Ads_Dpkg.Pr_Enabled
             »    False
 5648   5657 ATC_DISCRETES_PKG:body.Adson_Flag
             »    False
 5649   5658 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
             »     true
 5650   5659 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
             »     true
 5651   5660 ^Noise_End_Alt_Status                                                                                          Takeoff_Alt_Type
             » s.Active
 5652   5661 ^Noise_Speed_Val
             »     True
 5653   5662 ^Noise_TSPD.valid
             »     True
 5654   5663 ^Noise_TSPD.Data
             »    150.0
 5655   5664 ^Noise_End_Alt
             »    300.0
 5656   5665 ^Noise_Speed
             »    250.0
 5657   5666 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
             »     True
 5658  5667 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
            »     True
 5659  5668 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
            »     21.0
 5660  5669 Perf_Background_Dpkg.Psorgalt
            »  36080.0
 5661  5670 Perf_Background_Dpkg.Noise_Data.Altitude.Data
            »      0.0
 5662  5671 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
            »    False
 5663  5672 Perf_Background_Dpkg.Noise_Data.Speed.Data
            »      0.0
 5664  5673 Perf_Background_Dpkg.Noise_Data.Speed.Valid
            »    False
 5665  5674 Perf_Background_Dpkg.Noise_Data.Tspd.Data
            »      0.0
 5666  5675 Perf_Background_Dpkg.Noise_Data.Tspd.Valid
            »    False
 5667  5676 Perf_Background_Dpkg.Pcfltphase
            »  Takeoff
 5668  5677 Perf_Background_Dpkg.Psacalt
            »     50.0
 5669  5678 Perf_Background_Dpkg.Psacaltv
            »     True
 5670  5679 Perf_Background_Dpkg.Pstruetrkv
            »     True
 5671  5680 Perf_Background_Dpkg.Psvgrnd
            »      1.0
 5672  5681 Perf_Background_Dpkg.Psvgrndval
            »     True
 5673  5682 Perf_Background_Dpkg.Pcacposn.Data.Lat
            »    100.0
 5674  5683 Perf_Background_Dpkg.Pcacposn.Data.Lon
            »    100.0
 5675  5684 Perf_Background_Dpkg.Pcacposn.Valid
            »    false
 5676  5685 Perf_Background_Dpkg.Pstruetrack
            »      0.2
 5677  5686 Perf_Background_Dpkg.Pswindbrg
            »    150.0
 5678  5687 Perf_Background_Dpkg.Pswindmag
            »    130.0
 5679  5688 Perf_Background_Dpkg.Pswindval
            »    false
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 5680   5689 Fmcs_Partition_Data_Pkg.Ops_Time.Hour
             »        1
 5681   5690 Fmcs_Partition_Data_Pkg.Ops_Time.Minute
             »        1
 5682   5691 Fmcs_Partition_Data_Pkg.Ops_Time.Second
             »        1
 5683   5692 Perf_Dpkg.Psnumengout
             »        1
 5684   5693 Perf_Background_Dpkg.Psvgonpath
             »     true
 5685   5694 Perf_Background_Dpkg.Pscrzalt.data
             »     10.0
 5686   5695 Perf_Background_Dpkg.Pscrzalt.Valid
             »    false
 5687   5696 Perf_Background_Dpkg.Psfinaldes
             »    false
 5688   5697 Guid_Ext_Dpkg.Active_Speed_Restriction.Cas
             »    230.0
 5689   5698 Guid_Ext_Dpkg.Active_Speed_Restriction.Alt
             »  15000.0
 5690   5699 Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type                                                     Vg_Ext_Tpkg.Clb
             » _Spd_Lim
 5691   5700 Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident                                                                        "
             » ABCD   "
 5692   5701 Perf_Background_Dpkg.Pcactorsec                                                                                         S
             » econdary
 5693   5702 Perf_Dpkg.Pcfirstpred(Secondary)
             »     True
 5694   5703 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
             »    0.011
 5695   5704 Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid
             »     True
 5696   5705 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »     9.99
 5697   5706 Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid
             »     True
 5698   5707 Perf_Background_Dpkg.Psfirstpass
             »    False
 5699   5708 Perf_Background_Dpkg.Psonofrstpas
             »    False
 5700   5709 Perf_Background_Dpkg.Psftpbwritok
             »    False
 5701   5710 Perf_Background_Dpkg.Psvsact
             »     True
 5702  5711 Perf_Background_Dpkg.Psfpaact
            »     True
 5703  5712 Perf_Background_Dpkg.Pslvlatbcalt
            »     True
 5704  5713 Perf_Integration_Dpkg.Pslvlblwpth
            »     True
 5705  5714 Perf_Background_Dpkg.Psfi_Possble
            »     True
 5706  5715 Perf_Background_Dpkg.On_Icao_Leg_Decel
            »     True
 5707  5716 Perf_Background_Dpkg.Psignorehm
            »     True
 5708  5717 Perf_Integration_Dpkg.Pcoldwspdchg                                                                                          Ica
            » olimited
 5709  5718 Perf_Background_Dpkg.Adc_Fg_Valid
            »    False
 5710  5719 Perf_Background_Dpkg.Psenginesoff
            »     True
 5711  5720 Perf_Dpkg.Pcdelspdrec.Predicted
            »     True
 5712  5721 Perf_Background_Dpkg.Pcoldeconcas.Valid
            »     True
 5713  5722 Prf_Bkgnd_Pkg:body.Fgspdsvalid
            »     True
 5714  5723 Perf_Dpkg.takeoff_gwt.valid
            »     True
 5715  5724 Perf_Dpkg.takeoff_gwt.data
            »    400.0
 5716  5725 Guid_Spds_Dpkg.Vc3prtlimcas
            »      1.0
 5717  5726 Perf_Background_Dpkg.Pcpredcount(Active)
            »        2
 5718  5727 Perf_Dpkg.Psfrstactprd
            »    False
 5719  5728 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
            »    False
 5720  5729 Perf_Background_Dpkg.Psautolat
            »     True
 5721  5730 Perf_Background_Dpkg.Psappspdlat
            »     True
 5722  5731 Perf_Background_Dpkg.Psdestqnh.Valid
            »    false
 5723  5732 Perf_Background_Dpkg.Pcdestglidx
            »        0
 5724   5733 Perf_Background_Dpkg.Psdestqnh.Data
             »      0.0
 5725   5734 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
             »     True
 5726   5735 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
             »     True
 5727   5736 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
             »     true
 5728   5737 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target
             »    false
 5729   5738 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active
             »     True
 5730   5739 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target
             »    false
 5731   5740 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
             »    false
 5732   5741 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
             »     True
 5733   5742 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
             »     true
 5734   5743 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
             »     true
 5735   5744 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
             »     true
 5736   5745 Perf_Background_Dpkg.Speed_Annunciation.Cas
             »      0.0
 5737   5746 Perf_Background_Dpkg.Speed_Annunciation.Alt
             »      0.0
 5738   5747 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type                                                     Vg_Ext_Tpkg
             » .Invalid
 5739   5748 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                                                                   "
             »        "
 5740   5749 Perf_Background_Dpkg.Flex_Isadev.Data
             »      5.0
 5741   5750 Perf_Background_Dpkg.Pslimited
             »    false
 5742   5751 Perf_Background_Dpkg.Pcvertmode                                                                       Perf_Int_Base_Tpkg
             » .Openclb
 5743   5752 Perf_Background_Dpkg.Pcspeedmode                                                                            Perf_Ext_Tpk
             » g.Vmecon
 5744   5753 Computoldtgt
             »     True
 5745   5754 Curspdsval
             »    False
```

```


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Curcas                                                                          0.0          0.001                 0.0
» 0000E+00  P
Curmach                                                                         0.0          0.001                 0.0
» 0000E+00  P
Xoveralt                                                                    25000.0          0.001                 2.5
» 0000E+04  P
Perf_Background_Dpkg.Pslimited                                              /= true          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Psdestqnh.Data                                       /= 1013.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pcvertmode                         /= Perf_Int_Base_Tpkg.Econo          (N/A)
»  OPENCLB  P
Perf_Background_Dpkg.Psgw                                                       0.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Pcspeedmode                            /= Perf_Ext_Tpkg.Vmecon          (N/A)
»  VMEXPED  P
Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                                      False          (N/A)
»    FALSE  P
Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                                     False          (N/A)
»    FALSE  P


====> All 10 Comparisons Passed <====


TESTID: 33

    If the current itinerary is one of the following:
    - Active Primary Flight Plan Predictions;
    - Temporary Primary Flight Plan Predictions;
    -Current mode predictions(Normal or High priority);
    - Optimum altitude predictions;
    then the descent path shall be retrieved from the descent path object
    manager via a call to Perf_Ext_Despath.Pgvdespath.

    When flight phase is beyond cruise with manual speed mode, then the speed validity shall be set as follows.
        If CAS is selected on FCU then Valid flag for MACH speed is set to False.
        If MACH is selected on FCU and A/C is below crossover altitude then Valid flag for CAS speed is set to False.
```

```
5778  5787     MACH is selected on FCU and A/C is below crossover altitude in this test case.
5779  5788     PERF_SDD_07545_INT
5780  5789
5781  5790     Retrieval of trip data for the current working flight plan shall be done by calling Sys_Perf_Interface_Dpkg.Pctrip
           » time.
5782  5791     PERF_SDD_07547_INT
5783  5792
5784  5793     ADS enabled flags (Intermediate intent enable and Predicted route enable) shall be repacked to output on FTB1.
5785  5794     PERF_SDD_07548_INT
5786  5795
5787  5796     If the working flight plan is either Is_Active or Copy_From_Active, then ISA temperature deviation shall be comput
           » ed as follows.
5788  5797     ISA temperature deviation = Static air temperature + Zero degrees Celsius in degrees Kelvin - ISA standard tempera
           » ture
5789  5798     at an altitude.
5790  5799     Where,
5791  5800         - ISA standard temperature = Standard atmosphere temperature at sea level *
5792  5801                                    (1.0 -  ( ( Temperature lapse rate / Standard atmosphere temperature at sea level )
           »  * MinAlt ) ).
5793  5802         - MinAlt is minimum altitude of the aircraft altitude and TROPOPAUSE altitude.
5794  5803     PERF_SDD_07549(PERF_SRD_9587, PERF_SRD_9656_INT)
5795  5804
5796  5805     REQUIREMENTS UNDER EVALUATION : PERF_SDD_3888_INT, PERF_SDD_07545_INT, PERF_SDD_07547_INT,
5797  5806                                     PERF_SDD_07548_INT, PERF_SDD_07549(PERF_SRD_9587, PERF_SRD_9656_INT)
5798  5807     SUPPORTING REQUIREMENTS : N/A
5799  5808
5800  5809
5801  5810 INPUT                                                                                                       VALUE
5802  5811 ---------------------------------------------------------------------------------------------------  ------------------
           » --------
5803  5812 CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
           »     True
5804  5813 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
           »     True
5805  5814 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
           »     True
5806  5815 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
           »     True
5807  5816 CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
           »     True
5808  5817 Perf_Dpkg.Min_Gwt
           »    100.0
5809  5818 Perf_Dpkg.Max_Gwt
           »    400.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 5810   5819 Perf_Background_Dpkg.Flight_Plan_Type                                                                            I
             » s_Active
 5811   5820 Perf_Background_Dpkg.Psignorehm
             »     True
 5812   5821 Perf_Background_Dpkg.Pcfltphase
             » Goaround
 5813   5822 Perf_Background_Dpkg.Ats_Enable
             »     True
 5814   5823 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             » Goaround
 5815   5824 Perf_Background_Dpkg.Pcactorsec
             »   Active
 5816   5825 Perf_Background_Dpkg.Psacalt
             »  10000.0
 5817   5826 Perf_Background_Dpkg.Pstropoalt
             »      0.0
 5818   5827 Perf_Database_Dpkg.Psmmo
             »     0.45
 5819   5828 Perf_Background_Dpkg.Pszfw
             »    300.0
 5820   5829 Perf_Background_Dpkg.Psblockfuel
             »     50.0
 5821   5830 Perf_Background_Dpkg.Pstaxifuel
             »     25.0
 5822   5831 Perf_Background_Dpkg.Psairborne
             »     True
 5823   5832 Perf_Background_Dpkg.Psautolat
             »    False
 5824   5833 Guid_Ext_Dpkg.Gcxxlatautoc
             »    False
 5825   5834 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
             »    False
 5826   5835 Perf_Background_Dpkg.Psengout
             »    False
 5827   5836 Cdk_Vert_Dpkg:Body.Engine_Out_I
             »     True
 5828   5837 Perf_Background_Dpkg.Pcholdflags.Hmdecel
             »     True
 5829   5838 Perf_Dpkg.Repredict_Hm_Decel
             »     True
 5830   5839 Perf_Background_DPkg.Pshmdecel
             »     True
 5831   5840 Perf_Background_Dpkg.Pcholdflags.Hmactive
             »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 5832   5841 Perf_Ads_Dpkg.Fi_Enabled
             »    False
 5833   5842 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
             »    False
 5834   5843 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
             »     True
 5835   5844 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
             »     True
 5836   5845 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
             »     True
 5837   5846 Perf_Background_Dpkg.Pcholdflags.Hmdistval
             »     True
 5838   5847 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
             »     True
 5839   5848 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
             »     True
 5840   5849 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
             »     True
 5841   5850 Perf_Background_Dpkg.Psappspdlat
             »     True
 5842   5851 Perf_Dpkg.Pcengoutprds
             »   Altpln
 5843   5852 Perf_Background_Dpkg.Pcpathref
             »   Onpath
 5844   5853 Guid_Ext_Dpkg.Va3Vertmde                                                                                       Perf_Ext_Tp
             » kg.Vmspd
 5845   5854 Perf_Background_DPkg.Pscurcas
             »      5.0
 5846   5855 Perf_Background_DPkg.Pscurmach
             »      5.0
 5847   5856 Perf_Background_DPkg.Pscurtas
             »      5.0
 5848   5857 Perf_Background_Dpkg.Pcitin.Itinerary                                                                             Optimum_
             » Altitude
 5849   5858 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 5850   5859 Perf_Background_Dpkg.Pstogwtval
             »    False
 5851   5860 Perf_Background_Dpkg.Pstogwt
             »     50.0
 5852   5861 Perf_Background_Dpkg.Pcgwind
             »  Invalid
 5853   5862 Perf_Background_Dpkg.Psgw
             »      0.0
```

```
5854  5863 Perf_Dpkg.Gross_Weight.Status
           »    Valid
5855  5864 Perf_Dpkg.Gross_Weight.Data
           »    150.0
5856  5865 Perf_Integration_DPkg.Pcairbrakes
           »   Fullab
5857  5866 Perf_Background_Dpkg.Pcacconfig
           »        5
5858  5867 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
           »    False
5859  5868 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
5860  5869 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    200.0
5861  5870 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
5862  5871 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
5863  5872 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
5864  5873 Perf_Background_Dpkg.Psstpclbact
           »     True
5865  5874 Perf_Background_Dpkg.Psstpdesact
           »     True
5866  5875 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
5867  5876 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
5868  5877 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
5869  5878 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
5870  5879 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
5871  5880 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
5872  5881 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
5873  5882 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
5874  5883 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
5875  5884 Perf_Background_Dpkg.Psinertvs
           »      5.0
```

```
Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
»        0
Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
»        2
Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
»        0
Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
»        2
Perf_Ads_Dpkg.Pr_Enabled
»    False
ATC_DISCRETES_PKG:body.Adson_Flag
»    False
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
»     true
CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
»     true
^Noise_End_Alt_Status                                                                                   Takeoff_Alt_Type
» s.Active
^Noise_Speed_Val
»     True
Perf_Background_Dpkg.Trip_Data.FUEL
»      0.0
Perf_Background_Dpkg.Trip_Data.TIME
»      0.0
Perf_Flight_Test_Dpkg.Perf_Repack_Data.Iienabled
»     True
Perf_Flight_Test_Dpkg.Perf_Repack_Data.Prenabled
»     True
Perf_Background_Dpkg.Psisadev
»      0.0
Perf_Background_Dpkg.Pcmanspd.Casvalid
»     True
Machmode
»     True
Perf_Background_Dpkg.Pcmanspd.Speed.Xoveralt
»  20000.0


OUTPUT                                                           EXPECTED                TOLERANCE              ACTUAL
»           P/F
-----------------------------------------------------  ------------------------------  -------------  ------------------
» --------  ----
CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec                                 True          (N/A)
»     TRUE  P
```

```


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Data_Storage.Pctriptime(ACTIVE).FUEL
»   1000.0
Data_Storage.Pctriptime(ACTIVE).TIME
»   3600.0


OUTPUT                                                          EXPECTED               TOLERANCE               ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Psisadev                                                    -15.0          0.001                -1.5
» 0000E+01  P
Perf_Background_Dpkg.Pcmanspd.Casvalid                                           False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Trip_Data.FUEL                                             1000.0          0.001                 1.0
» 0000E+03  P
Perf_Background_Dpkg.Trip_Data.TIME                                             3600.0          0.001                 3.6
» 0000E+03  P
Perf_Flight_Test_Dpkg.Perf_Repack_Data.Iienabled                                 False          (N/A)
»    FALSE  P
Perf_Flight_Test_Dpkg.Perf_Repack_Data.Prenabled                                 False          (N/A)
»    FALSE  P


====> All 7 Comparisons Passed <====


TESTID: 34

the descent path shall be retrieved from the descent path object manager via a call to Perf_Ext_Despath.Pgvdespath if
the current itinerary is Temporary Primary Flight Plan Predictions.

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
ii) If the DES SPD LIM Perf leg is Included, then
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
 Optimum Descent CAS is set to the DES SPD LIM speed.

Here verify conditon 3(the flight plan is not Temporary) is not satisfied, Perf_Buffer.Getperfleg procedure will not b
» e called.
PERF_SDD_08158_INT

When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
»  set to False.
1. First Preds After Insert Temporary indication is True or
2. The descent speed limit has not been latched or
3. The temporary flight plan does not exist.

Here verify condition 3(The temporary flight plan does not exist) is satisfied, Psdeslimspdchg is set to False.
PERF_SDD_08159_INT

If the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and the predictions count is equal to one.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT, PERF_SDD_3888_INT, PERF_SDD_08158_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A
```

```
5974  5983
5975  5984
5976  5985 INPUT                                                                                                          VALUE
5977  5986 --------------------------------------------------------------------------------------------------  ------------------
           » --------
5978  5987 Perf_Background_Dpkg.Flight_Plan_Type                                                             Perf_Int_Base_Tpkg.I
           » s_Active
5979  5988 Perf_Background_Dpkg.Psairborne
           »    False
5980  5989 Perf_Background_Dpkg.Psdeslimspdchg
           »     True
5981  5990 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
           »     True
5982  5991 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
           »    False
5983  5992 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
5984  5993 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »  Descent
5985  5994 Perf_Background_Dpkg.Pcactorsec
           »   Active
5986  5995 Perf_Background_Dpkg.Pcfltphase
           »  Descent
5987  5996 Guid_Spds_Dpkg.Vc3prtlimcas
           »    160.0
5988  5997 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
           »     True
5989  5998 Perf_Background_Dpkg.Psautolat
           »     True
5990  5999 Guid_Ext_Dpkg.Gcxxlatautoc
           »     True
5991  6000 Perf_Background_Dpkg.Psappspdlat
           »    False
5992  6001 Perf_Background_Dpkg.Pcpredcount(Active)
           »        1
5993  6002 Perf_Dpkg.Psfrstactprd
           »    False
5994  6003 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
           »    False
5995  6004 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
5996  6005 Perf_Background_Dpkg.Pcitin.Flight_Plan                                                                              T
           » emporary
5997  6006 Perf_Background_Dpkg.Pcitin.Itinerary                                                                          Prim_Fp
```

```
            » ln_Preds
 5998  6007 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
            »    False
 5999  6008
 6000  6009
 6001  6010 OUTPUT                                                          EXPECTED                 TOLERANCE             ACTUAL
            »          P/F
 6002  6011 ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
 6003  6012 CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec                              True          (N/A)
            »     TRUE  P
 6004  6013 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                   160.0          0.001                  1.6
            » 0000E+02  P
 6005  6014 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE                          False          (N/A)
            »    FALSE  P
 6006  6015 Perf_Background_Dpkg.Psdeslimspdchg                                         False          (N/A)
            »    FALSE  P
 6007  6016
 6008  6017
 6009  6018 ====> All 4 Comparisons Passed <====
 6010  6019
 6011  6020
 6012  6021 TESTID: 35
 6013  6022
 6014  6023 if the current itinerary is Fuel_Plan_Fpln_Preds,and Psgetout set to False, then the descent path shall be
 6015  6024 invalidated to cause it to be rebuilt.
 6016  6025
 6017  6026 When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
            »  set to False.
 6018  6027 1. First Preds After Insert Temporary indication is True
 6019  6028 2. The descent speed limit has not been latched
 6020  6029 3. The temporary flight plan does not exist.
 6021  6030
 6022  6031 Here conditon 1,2,3 are not satisfied, Psdeslimspdchg is not set to False.
 6023  6032 PERF_SDD_08159_INT
 6024  6033
 6025  6034 If the current VG CAS and Mach targets are valid, and the flight phase is Descent or
 6026  6035 Approach, then the Optimum Descent speeds shall be set as follows:
 6027  6036 if the following are true:
 6028  6037   - VG Partially-Limited CAS is non-zero, and Any of the following are true:
 6029  6038     - The A/C is currently in a deceleration, and either:
 6030  6039       - The predictions count is less than or equal to one, or
 6031  6040       - The current working flight plan is Active and the difference between the current prediction sequence
 6032  6041       counter and starting prediction sequence counter is less than or equal to 2, or
```

```
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and current working flight plan is Active and the difference between
-- the current prediction sequence counter and starting prediction sequence counter is equal to 2.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT, PERF_SDD_3681_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                      VALUE
---------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                              Perf_Int_Base_Tpkg.I
» s_Active
Perf_Background_Dpkg.Psairborne
»    False
Perf_Background_Dpkg.Psdeslimspdchg
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
»     True
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
»     True
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
»    170.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
```

```
               »     True
 6066   6075 Perf_Background_Dpkg.Psautolat
               »     True
 6067   6076 Guid_Ext_Dpkg.Gcxxlatautoc
               »     True
 6068   6077 Perf_Background_Dpkg.Psappspdlat
               »    False
 6069   6078 Perf_Background_Dpkg.Pcpredcount(Active)
               »        3
 6070   6079 Perf_Background_Dpkg.Active_Start_Predcount
               »        1
 6071   6080 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
               »    False
 6072   6081 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
               »    345.0
 6073   6082 Perf_Background_Dpkg.Pcitin.Itinerary                                                                       Fuel_Plan_Fp
               » ln_Preds
 6074   6083 Perf_Background_Dpkg.Psgetout
               »    False
 6075   6084 Perf_Despath_Dpkg.Pcdespath.Vgavalid
               »     True
 6076   6085
 6077   6086
 6078   6087 OUTPUT                                                          EXPECTED               TOLERANCE             ACTUAL
               »           P/F
 6079   6088 ----------------------------------------------------  ----------------------------  -------------  ------------------
               » --------  ----
 6080   6089 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                   170.0          0.001                   1.7
               » 0000E+02  P
 6081   6090 Perf_Despath_Dpkg.Pcdespath.Vgavalid                                        False          (N/A)
               »    FALSE  P
 6082   6091 Perf_Background_Dpkg.Psdeslimspdchg                                          True          (N/A)
               »     TRUE  P
 6083   6092
 6084   6093
 6085   6094 ====> All 3 Comparisons Passed <====
 6086   6095
 6087   6096
 6088   6097 TESTID: 36
 6089   6098
 6090   6099 if the current itinerary is Primary Flight Plan Predictions for a flight plan other than Active or Temporary,and
 6091   6100 Psgetout set to False, then the descent path shall be invalidated to cause it to be rebuilt.
 6092   6101
 6093   6102 When following conditions are met:
```

```
6094   6103 1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
6095   6104 2. the descent speed limit is latched
6096   6105 3. the flight plan is Temporary,
6097   6106 4. the flight phase is descent
6098   6107 then the following shall be done:
6099   6108 i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
6100   6109 ii) If the DES SPD LIM Perf leg is Included, then
6101   6110 If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
6102   6111  Optimum Descent CAS is set to the VG Partially-Limited CAS
6103   6112 Otherwise,
6104   6113  Optimum Descent CAS is set to the DES SPD LIM speed.
6105   6114
6106   6115 Here verify conditon 4(the flight phase is not descent ) is not satisfied, Perf_Buffer.Getperfleg procedure will not b
            » e called.
6107   6116 PERF_SDD_08158_INT
6108   6117
6109   6118 When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
            »  set to False.
6110   6119 1. First Preds After Insert Temporary indication is True
6111   6120 2. The descent speed limit has not been latched
6112   6121 3. The temporary flight plan does not exist.
6113   6122
6114   6123 Here verify condition 1(First Preds After Insert Temporary indication is True) is satisfied, Psdeslimspdchg is set to
            » False.
6115   6124 PERF_SDD_08159_INT
6116   6125
6117   6126 If the current VG CAS and Mach targets are valid, and the flight phase is Descent or
6118   6127 Approach, then the Optimum Descent speeds shall be set as follows:
6119   6128 if the following are true:
6120   6129   - VG Partially-Limited CAS is non-zero, and Any of the following are true:
6121   6130     - The A/C is currently in a deceleration, and either:
6122   6131       - The predictions count is less than or equal to one, or
6123   6132       - The current working flight plan is Active and the difference between the current prediction sequence
6124   6133       counter and starting prediction sequence counter is less than or equal to 2, or
6125   6134       - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
6126   6135       being processed is Current Mode predictions(Normal or High Priority) ,or
6127   6136       - First Preds After Insert Temporary indication is True;
6128   6137     - The A/C is not in Auto Lateral mode,
6129   6138     - Approach Speeds have been latched.
6130   6139 then,
6131   6140   Optimum Descent CAS is set to the VG Partially-Limited CAS
6132   6141 otherwise,
6133   6142   Optimum Descent CAS is set to current VG CAS target.
6134   6143 -- In this case, flight phase is Approach and current VG CAS and Mach targets are valid.
```

```
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and First Preds After Insert Temporary indication is True.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT, PERF_SDD_3681_INT, PERF_SDD_08158_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                           VALUE
-------------------------------------------------------------------------------------------------  -----------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                 Perf_Int_Base_Tpkg.I
» s_Active
Perf_Background_Dpkg.Psairborne
»    False
Perf_Background_Dpkg.Psdeslimspdchg
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
»     True
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
»     True
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
» Approach
Perf_Background_Dpkg.Pcfltphase
» Approach
Perf_Background_Dpkg.Pcactorsec                                                                                        T
» emporary
Guid_Spds_Dpkg.Vc3prtlimcas
»    183.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»     True
Perf_Background_Dpkg.Psautolat
»     True
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Psappspdlat
»    False
Perf_Background_Dpkg.Pcpredcount(Temporary)
»        3
Perf_Dpkg.Psfrstactprd
»     True
```

```
6162  6171 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
           »     True
6163  6172 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
6164  6173 Perf_Background_Dpkg.Pcitin.Itinerary                                                                          Prim_Fp
           » ln_Preds
6165  6174 Perf_Background_Dpkg.Pcitin.Flight_Plan                                                                              S
           » econdary
6166  6175 Perf_Background_Dpkg.Psgetout
           »    False
6167  6176 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     True
6168  6177 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
           »    False
6169  6178
6170  6179
6171  6180 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
           »           P/F
6172  6181 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
6173  6182 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                     183.0          0.001                 1.8
           » 3000E+02  P
6174  6183 Perf_Despath_Dpkg.Pcdespath.Vgavalid                                          False          (N/A)
           »    FALSE  P
6175  6184 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE                            False          (N/A)
           »    FALSE  P
6176  6185 Perf_Background_Dpkg.Psdeslimspdchg                                           False          (N/A)
           »    FALSE  P
6177  6186
6178  6187
6179  6188 ====> All 4 Comparisons Passed <====
6180  6189
6181  6190
6182  6191 TESTID: 37
6183  6192
6184  6193 if the current VG CAS and Mach targets are valid, and the flight phase is Descent or Approach, then the Optimum Descen
           » t Mach
6185  6194 shall be set as follows:if the flight phase is Descent, then Optimum Descent Mach is set to current VG Mach target;oth
           » erwise,
6186  6195 if Real-Time computed Economy Descent speeds are invalid, then Optimum Descent Mach is set to MMO.
6187  6196
6188  6197 if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
6189  6198 Approach, then the Optimum Descent speeds shall be set as follows:
6190  6199 if the following are true:
```

```
6191  6200   - VG Partially-Limited CAS is non-zero, and Any of the following are true:
6192  6201     - The A/C is currently in a deceleration, and either:
6193  6202       - The predictions count is less than or equal to one, or
6194  6203       - The current working flight plan is Active and the difference between the current prediction sequence
6195  6204       counter and starting prediction sequence counter is less than or equal to 2, or
6196  6205       - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
6197  6206       being processed is Current Mode predictions(Normal or High Priority) ,or
6198  6207       - First Preds After Insert Temporary indication is True;
6199  6208     - The A/C is not in Auto Lateral mode,
6200  6209     - Approach Speeds have been latched.
6201  6210 then,
6202  6211   Optimum Descent CAS is set to the VG Partially-Limited CAS
6203  6212 otherwise,
6204  6213   Optimum Descent CAS is set to current VG CAS target.
6205  6214 -- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
6206  6215 -- VG Partially-Limited CAS is non-zero.
6207  6216 -- The A/C is not in Auto Lateral mode.
6208  6217 -- Optimum Descent CAS is set to the VG Partially-Limited CAS
6209  6218
6210  6219     REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT, PERF_SDD_2276_INT
6211  6220
6212  6221     SUPPORTING REQUIREMENTS : N/A
6213  6222
6214  6223
6215  6224 INPUT                                                                                                        VALUE
6216  6225 ---------------------------------------------------------------------------------------------------  ------------------
           » --------
6217  6226 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
6218  6227 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
6219  6228 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »  Descent
6220  6229 Perf_Background_Dpkg.Pcfltphase
           »  Descent
6221  6230 Perf_Background_Dpkg.Pcactorsec
           »   Active
6222  6231 Guid_Spds_Dpkg.Vc3prtlimcas
           »      3.0
6223  6232 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
           »    False
6224  6233 Perf_Background_Dpkg.Psautolat
           »    False
6225  6234 Guid_Ext_Dpkg.Gcxxlatautoc
```

```
»    False
Perf_Background_Dpkg.Psappspdlat
»    False
Perf_Background_Dpkg.Pcpredcount(Active)
»        3
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»     True
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
»    345.0
Guid_Spds_Dpkg.Vc3curspds.Mach.Data
»      3.5
Perf_Database_Dpkg.Psmmo
»      1.0


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                       3.0          0.001                 3.0
» 0000E+00  P
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                                      3.5          0.001                 3.5
» 0000E+00  P


====> All 2 Comparisons Passed <====


TESTID: 38

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Approach and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- Approach Speeds have been latched.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                                                VALUE
-----------------------------------------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
» Approach
Perf_Background_Dpkg.Pcfltphase
» Approach
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
»      3.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»    False
Perf_Background_Dpkg.Psautolat
»     True
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Psappspdlat
»     True
Perf_Background_Dpkg.Pcpredcount(Active)
»        3
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»     True
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
»    345.0
```

```


OUTPUT                                                          EXPECTED                 TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                                    3.0          0.001                3.0
» 0000E+00  P


====> All 1 Comparisons Passed <====


TESTID: 39
the currently active flight phase is climb, the real time climb speeds are valid for current working flight plan then
Optimum Econ/LRC climb CAS and Mach are set to the real time climb CAS and Mach speeds respectively for the current wo
» rking flight plan.
PERF_SDD_08226(PERF_SRD_2801,PERF_SRD_23365,PERF_SRD_23455)
the current flight phase is not cruise then
The original step speeds (CAS and Mach) before speed limiting are not be changed.
The flag indicating Predictions are in step not be changed.
The Step CAS and Mach speeds not be changed.
Optimum Econ/LRC Cruise CAS and Mach not be changed.
Flag indicating the speed targets from FG not be changed.
 PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)


INPUT                                                                                                           VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»    Climb
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Valid
»     true
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Cas
»    230.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Climb).Mach
»      0.6
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
»     True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas
»    265.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
6320   6329 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach
            »     0.55
6321   6330 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
            »     True
6322   6331 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas
            »    288.0
6323   6332 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach
            »     0.66
6324   6333 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec )
            »   100.00
6325   6334 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec )
            »     0.12
6326   6335 Perf_Background_Dpkg.Psinstep
            »    False
6327   6336 Perf_Background_Dpkg.Psstepcas
            »   200.00
6328   6337 Perf_Background_Dpkg.Psstepmach
            »     0.35
6329   6338 Perf_Background_Dpkg.Psecncrzmach
            »    200.0
6330   6339 Perf_Background_Dpkg.Psecncrzcas
            »     0.55
6331   6340 Prf_Bkgnd_Pkg:body.Fgspdsvalid
            »     True
6332   6341 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
            »     True
6333   6342 Perf_Background_Dpkg.Pcoptinitspd.Clb.Cas
            »      0.0
6334   6343 Perf_Background_Dpkg.Pcoptinitspd.Clb.Mach
            »      0.0
6335   6344
6336   6345
6337   6346 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
6338   6347 ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
6339   6348 Prf_Bkgnd_Pkg:body.Fgspdsvalid                                               True          (N/A)
            »     TRUE  P
6340   6349 Perf_Background_Dpkg.Pcoptinitspd.Clb.Cas                                   230.0          0.001                   2.3
            » 0000E+02  P
6341   6350 Perf_Background_Dpkg.Pcoptinitspd.Clb.Mach                                    0.6          0.001                   6.0
            » 0000E-01  P
6342   6351 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec )        100.00          0.001                   1.0
            » 0000E+02  P
```

```
 6343   6352 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec )           0.12          0.001                1.2
             » 0000E-01  P
 6344   6353 Perf_Background_Dpkg.Psinstep                                                  False          (N/A)
             »    FALSE  P
 6345   6354 Perf_Background_Dpkg.Psstepcas                                                200.00          0.001                2.0
             » 0000E+02  P
 6346   6355 Perf_Background_Dpkg.Psstepmach                                                 0.35          0.001                3.5
             » 0000E-01  P
 6347   6356 Perf_Background_Dpkg.Psecncrzmach                                              200.0          0.001                2.0
             » 0000E+02  P
 6348   6357 Perf_Background_Dpkg.Psecncrzcas                                                0.55          0.001                5.5
             » 0000E-01  P
 6349   6358
 6350   6359
 6351   6360 ====> All 10 Comparisons Passed <====
 6352   6361
 6353   6362
 6354   6363 TESTID: 40
 6355   6364 the currently active flight phase is climb,the real time climb speeds are not valid for current working flight plan th
             » en
 6356   6365 Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.
 6357   6366 PERF_SDD_08226(PERF_SRD_2801,PERF_SRD_23365,PERF_SRD_23455)
 6358   6367
 6359   6368
 6360   6369 INPUT                                                                                                          VALUE
 6361   6370 ---------------------------------------------------------------------------------------------------  ------------------
             » --------
 6362   6371 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »    climb
 6363   6372 Perf_Background_Dpkg.Pcactorsec
             »   Active
 6364   6373 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(climb).Valid
             »    false
 6365   6374 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
             »    false
 6366   6375 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
             »    false
 6367   6376 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
             »    false
 6368   6377 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(climb).Mach
             »      0.8
 6369   6378 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(climb).Cas
             »    330.0
 6370   6379 Perf_Background_Dpkg.Psecncrzmach
```

```
            »      0.0
 6371  6380 Perf_Background_Dpkg.Psecncrzcas
            »      0.0
 6372  6381 Prf_Bkgnd_Pkg:body.Fgspdsvalid
            »     True
 6373  6382 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
            »     True
 6374  6383
 6375  6384
 6376  6385 OUTPUT                                                         EXPECTED                TOLERANCE              ACTUAL
            »           P/F
 6377  6386 ----------------------------------------------------  ---------------------------  -------------  ------------------
            » --------  ----
 6378  6387 Prf_Bkgnd_Pkg:body.Fgspdsvalid                                               false          (N/A)
            »    FALSE  P
 6379  6388 Perf_Background_Dpkg.Psecncrzmach                                              0.0          0.001                 0.0
            » 0000E+00  P
 6380  6389 Perf_Background_Dpkg.Psecncrzcas                                               0.0          0.001                 0.0
            » 0000E+00  P
 6381  6390
 6382  6391
 6383  6392 ====> All 3 Comparisons Passed <====
 6384  6393
 6385  6394
 6386  6395 TESTID: 41
 6387  6396
 6388  6397     If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
 6389  6398    - Perf hold flag record (Pcholdflags) is copied from guidance
 6390  6399    - Descent limit latch record (Pcdeslimlat) is copied from guidance.
 6391  6400    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
            » h.
 6392  6401    - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
            »  considers
 6393  6402      the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
 6394  6403    - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
            »  HM if no
 6395  6404      deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
            » lear the HM
 6396  6405      leg deleted while in decel to HM flag (Pshmdeleted).
 6397  6406    - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
            » d, and the
 6398  6407      HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
            » t is within
 6399  6408      the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
```

```
   - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
» l to HM,
     then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
    PERF_SDD_4794_INT
    This test case verify:
    (1)HM leg deleted while in decel to HM flag remain False (Pshmdeleted)  (F,F,F)

    This case verfify When mach target and the fcu mach selected mode are valid, the speed target tag is set to indica
» te Mach
    and FCU speed is set to the value of selected Mach.
    PERF_SDD_4779_INT

    Also verify when the current itinerary is Fuel_Plan_Fpln_Preds, but the A/C is in not Takeoff & Climb.
    so, Climb Auto Derate will not be processed.
    PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)

    Perf_Background_Dpkg.Use_Clb_Autodrt is not true, so Perf_Background_Dpkg.Climb_Autodrt.Is_Valid is set to false.
    PERF_SDD_07919 (PERF_SRD_12641)

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_4794_INT, PERF_SDD_4779_INT, PERF_SDD_4780_INT, PERF_SDD_07956, PERF_SDD_
» 07919,
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                                PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


INPUT                                                                                                          VALUE
----------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                         Copy_Fro
» m_Active
Perf_Background_Dpkg.Pcactorsec                                                                                      T
» emporary
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
»     True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel
»    False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn
»     True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel
»     True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv
»     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
6432   6441 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval
            »     True
6433   6442 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm
            »    False
6434   6443 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
            »    False
6435   6444 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
            »    False
6436   6445 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel
            »    False
6437   6446 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
            » Approach
6438   6447 Perf_Dpkg.Pshmdeleted
            »    False
6439   6448 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Mach
            »     0.68
6440   6449 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Mach
            »     True
6441   6450 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
            »     True
6442   6451 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Airspeed
            »    320.0
6443   6452 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Airspeed
            »    False
6444   6453 Perf_Background_Dpkg.Pcitin.Itinerary                                                                    Fuel_Plan_Fp
            » ln_Preds
6445   6454 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
            »     true
6446   6455 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
            »     True
6447   6456 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
            »     true
6448   6457 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
            »     True
6449   6458 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
            »     True
6450   6459 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
            »    20000
6451   6460 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
            »     79.0
6452   6461 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
            »    200.0
6453   6462 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
            »      0.5
```

```
6454   6463 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas
            »    600.0
6455   6464 Guid_Spds_Dpkg.Vc3curspds.Fltphase
            » Approach
6456   6465 Perf_Background_Dpkg.Pcholdflags.Hmactive
            »    False
6457   6466 Perf_Background_Dpkg.Pcholdflags.Hmdecel
            »     True
6458   6467 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
            »    False
6459   6468 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
            »    False
6460   6469 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
            »    False
6461   6470 Perf_Background_Dpkg.Pcholdflags.Hmdistval
            »    False
6462   6471 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
            »     True
6463   6472 Perf_Background_Dpkg.Pcspdtgttag                                                         Fmcs_Base_T
            » ypes.Cas
6464   6473 Perf_Background_Dpkg.Psfcuspd
            »      0.0
6465   6474 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid
            »     True
6466   6475 Perf_Background_Dpkg.Use_Clb_Autodrt
            »     True
6467   6476 Perf_Background_Dpkg.Pshmdecel
            »     True
6468   6477
6469   6478
6470   6479 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
6471   6480 ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
6472   6481 Perf_Background_Dpkg.Pcholdflags.Hmactive                                       True          (N/A)
            »     TRUE  P
6473   6482 Perf_Background_Dpkg.Pcholdflags.Hmdecel                                       False          (N/A)
            »    FALSE  P
6474   6483 Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                      True          (N/A)
            »     TRUE  P
6475   6484 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                      True          (N/A)
            »     TRUE  P
6476   6485 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                      True          (N/A)
            »     TRUE  P
```

```
6477  6486 Perf_Background_Dpkg.Pcholdflags.Hmdistval                                          True          (N/A)
           »     TRUE  P
6478  6487 Perf_Background_Dpkg.Pcholdflags.Consider_Hm                                       False          (N/A)
           »    FALSE  P
6479  6488 Perf_Dpkg.Pshmdeleted                                                              False          (N/A)
           »    FALSE  P
6480  6489 Perf_Background_Dpkg.Pcspdtgttag                                     Fmcs_Base_Types.Mach          (N/A)
           »     MACH  P
6481  6490 Perf_Background_Dpkg.Psfcuspd                                                       0.68          0.001                 6.8
           » 0000E-01  P
6482  6491 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                                        False          (N/A)
           »    FALSE  P
6483  6492 Perf_Background_Dpkg.Use_Clb_Autodrt                                               False          (N/A)
           »    FALSE  P
6484  6493 Perf_Background_Dpkg.Pshmdecel                                                     false          (N/A)
           »    FALSE  P
6485  6494
6486  6495
6487  6496 ====> All 13 Comparisons Passed <====
6488  6497
6489  6498
6490  6499 TESTID: 42
6491  6500
6492  6501     If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
6493  6502    - Perf hold flag record (Pcholdflags) is copied from guidance
6494  6503    - Descent limit latch record (Pcdeslimlat) is copied from guidance.
6495  6504    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
           » h.
6496  6505    - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
           »  considers
6497  6506      the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
6498  6507    - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
           »  HM if no
6499  6508      deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
           » lear the HM
6500  6509      leg deleted while in decel to HM flag (Pshmdeleted).
6501  6510    - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
           » d, and the
6502  6511      HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
           » t is within
6503  6512      the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
6504  6513    - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
           » l to HM,
6505  6514      then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
```

```
     PERF_SDD_4794_INT

    This case verify when CAS target is valid, and fcu mach selected mode is invalid(cas selected mode is valid), the
» speed target
    tag is set to indicate CAS and fcu speed is set to the value of selected CAS.
    PERF_SDD_4780_INT

    This test case verify
    (1)HM leg deleted while in decel to HM flag remain False (Pshmdeleted)  (T,T,F)
    (2)Flag indicating that the aircraft is within the HM decel zone (Pshmdecel) is set to True (T,F)
    (3)Flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to fals
» e (T,T,F)

    When the FPA mode active and the target retrieved from IO are valid,
    then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
    The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
»  retrieved
    from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
» rom ft/min
    to ft/sec. The flag indicating the vertical speed mode active is set to True.
    PERF_SDD_07504_INT
    --In this test case,Fpa_Target.Valid is false and Vs_Target.Valid is false
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_4794_INT, PERF_SDD_4779_INT, PERF_SDD_4780_INT,PERF_SDD_07504_INT
    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                           VALUE
----------------------------------------------------------------------------------------------------  -----------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                            Copy_Fro
» m_Active
Perf_Background_Dpkg.Pcactorsec                                                                                         T
» emporary
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
»    False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel
»     True
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn
»    False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel
»    False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv
»    False
Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval
```

```
                »    False
 6538   6547    Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm
                »     True
 6539   6548    Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
                »    False
 6540   6549    Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
                »    False
 6541   6550    Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel
                »    False
 6542   6551    Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
                » Approach
 6543   6552    Perf_Dpkg.Pshmdeleted
                »    False
 6544   6553    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Mach
                »     0.58
 6545   6554    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Mach
                »     True
 6546   6555    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
                »    False
 6547   6556    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Airspeed
                »    320.0
 6548   6557    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Airspeed
                »     True
 6549   6558    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
                »     True
 6550   6559    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
                »     true
 6551   6560    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target
                »    false
 6552   6561    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target
                »  57.3066
 6553   6562    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active
                »     true
 6554   6563    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target
                »    false
 6555   6564    Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target
                »     60.0
 6556   6565    Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
                »     True
 6557   6566    Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
                »     true
 6558   6567    Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
                »     True
 6559   6568    Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
```

```
             »     True
 6560   6569 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
             »    20000
 6561   6570 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
             »     79.0
 6562   6571 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
             »     60.0
 6563   6572 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
             »      1.5
 6564   6573 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
             »     true
 6565   6574 Perf_Background_Dpkg.Pcholdflags.Hmactive
             »     True
 6566   6575 Perf_Background_Dpkg.Pcholdflags.Hmdecel
             »    False
 6567   6576 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
             »     True
 6568   6577 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
             »     True
 6569   6578 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
             »     True
 6570   6579 Perf_Background_Dpkg.Pcholdflags.Hmdistval
             »     True
 6571   6580 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
             »    False
 6572   6581 Perf_Background_Dpkg.Pshmdecel
             »    False
 6573   6582 Perf_Background_Dpkg.Psconsider_Hm
             »     True
 6574   6583 Perf_Background_Dpkg.Pcspdtgttag                                                                                   Fmcs_Base_Ty
             » pes.Mach
 6575   6584 Perf_Background_Dpkg.Psfcuspd
             »      0.0
 6576   6585 Perf_Background_Dpkg.Psfpatgt
             »      0.0
 6577   6586 Perf_Background_Dpkg.Psfpaact
             »    false
 6578   6587 Perf_Integration_Dpkg.Psvstgt
             »      0.0
 6579   6588 Perf_Background_Dpkg.Psvsact
             »    false
 6580   6589
 6581   6590
 6582   6591 OUTPUT                                                            EXPECTED                TOLERANCE            ACTUAL
```

```
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcholdflags.Hmactive                                     False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pcholdflags.Hmdecel                                       True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                    False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                    False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                    False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pcholdflags.Hmdistval                                    False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pcholdflags.Consider_Hm                                   True          (N/A)
»     TRUE  P
Perf_Dpkg.Pshmdeleted                                                         False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pshmdecel                                                 True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Psconsider_Hm                                            False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Pcspdtgttag                                                CAS          (N/A)
»      CAS  P
Perf_Background_Dpkg.Psfcuspd                                                 320.0          0.001                 3.2
» 0000E+02  P
Perf_Background_Dpkg.Psfpatgt                                                /= 1.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Psfpaact                                               /= true          (N/A)
»    FALSE  P
Perf_Integration_Dpkg.Psvstgt                                                /= 1.0          0.001                 0.0
» 0000E+00  P
Perf_Background_Dpkg.Psvsact                                                /= true          (N/A)
»    FALSE  P


====> All 16 Comparisons Passed <====


TESTID: 43

    If the working flight plan is Active or Temporary, flags related to HM legs shall be set      as follows:
   - Perf hold flag record (Pcholdflags) is copied from guidance
```

```
 6609   6618    - Descent limit latch record (Pcdeslimlat) is copied from guidance.
 6610   6619    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to true if the current flight phase is approac
              » h.
 6611   6620    - If the Demand task has indicated that the current HM deceleration needs to be re-evaluated and Guidance no longer
              »  considers
 6612   6621      the aircraft to be in a HM deceleration, then the re-evaluation indication flag is cleared (Repredict_Hm_Decel).
 6613   6622    - If Guidance no longer considers the aircraft to be in a HM deceleration (or within 3 NM prior to the entry of the
              »  HM if no
 6614   6623      deceleration was predicted) and Demand task has indicated HM leg deleted while in decel to HM flag is set, then c
              » lear the HM
 6615   6624      leg deleted while in decel to HM flag (Pshmdeleted).
 6616   6625    - If Guidance considers the aircraft to be within 3 NM prior to the entry of the HM if no deceleration was predicte
              » d, and the
 6617   6626      HM leg has not been deleted while within 3 NM prior to the entry of the HM, then flag indicating that the aircraf
              » t is within
 6618   6627      the 3 NM prior to the entry of the HM shall be set to true. Otherwise, it is set to false.
 6619   6628    - If Guidance considers the aircraft to be in a HM deceleration, and the HM leg has  not been deleted while in dece
              » l to HM,
 6620   6629      then flag indicating that the aircraft is within the HM decel zone is set to true. Otherwise, it is set to false
 6621   6630     PERF_SDD_4794_INT
 6622   6631     This case verify when both PERF_SDD_4779_INT, PERF_SDD_4780_INT are not satisfied.
 6623   6632
 6624   6633     This test case verify
 6625   6634     (1)Flag indicating that the aircraft is within the 3 NM prior to the entry of the HM(Psconsider_Hm) is set to True
              »  (T,F,F)
 6626   6635
 6627   6636     When the FPA mode active and the target retrieved from IO are valid,
 6628   6637     then the FPA target is set to the retrieved FPA target, after conversion from Degrees to Radians.
 6629   6638     The flag indicating the FPA mode active is set to True.Otherwise, if the Vertical Speed mode active and the target
              »  retrieved
 6630   6639     from IO are valid, then the vertical speed target is set to the retrieved vertical speed target after conversion f
              » rom ft/min
 6631   6640     to ft/sec. The flag indicating the vertical speed mode active is set to True.
 6632   6641     PERF_SDD_07504_INT
 6633   6642     --In this test case,Fpa_Target.Valid is false and Vspd_Mode_Active.Data is false
 6634   6643     REQUIREMENTS UNDER EVALUATION : PERF_SDD_4794_INT, PERF_SDD_4779_INT, PERF_SDD_4780_INT,PERF_SDD_07504_INT
 6635   6644     SUPPORTING REQUIREMENTS : N/A
 6636   6645
 6637   6646
 6638   6647 INPUT                                                                                                  VALUE
 6639   6648 ----------------------------------------------------------------------------------------------  ------------------
              » --------
 6640   6649 Perf_Background_Dpkg.Flight_Plan_Type                                                                Copy_Fro
              » m_Active
```

```
6641  6650 Perf_Background_Dpkg.Pcactorsec                                                                                       T
           » emporary
6642  6651 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
6643  6652 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdecel
           »    False
6644  6653 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Manhmwarn
           »    False
6645  6654 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxdecel
           »    False
6646  6655 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hxpxactiv
           »    False
6647  6656 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmdistval
           »    False
6648  6657 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Consider_Hm
           »     True
6649  6658 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
           »    False
6650  6659 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Icaolim
           »    False
6651  6660 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Desdecel
           »    False
6652  6661 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
           » Approach
6653  6662 Perf_Dpkg.Pshmdeleted
           »    False
6654  6663 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Mach
           »     0.58
6655  6664 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Mach
           »    False
6656  6665 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
           »     True
6657  6666 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.Selected_Airspeed
           »    320.0
6658  6667 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_validity_rec.Selected_Airspeed
           »     True
6659  6668 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
           »     True
6660  6669 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Flight_Path_Angle_Mode_Active
           »     true
6661  6670 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Flight_Path_Angle_Target
           »    false
6662  6671 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Flight_Path_Angle_Target
           »  57.3066
```

```
6663  6672 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Vertical_Speed_Mode_Active
           »    false
6664  6673 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Vertical_Speed_Target
           »     true
6665  6674 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_rec.Vertical_Speed_Target
           »    451.0
6666  6675 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
           »     True
6667  6676 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
           »     true
6668  6677 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
           »     True
6669  6678 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
           »     True
6670  6679 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
           »    20000
6671  6680 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat
           »     79.0
6672  6681 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas
           »    451.0
6673  6682 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach
           »      1.0
6674  6683 CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status
           »     true
6675  6684 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
6676  6685 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
6677  6686 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
6678  6687 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
6679  6688 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
6680  6689 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
6681  6690 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
           »    False
6682  6691 Perf_Background_Dpkg.Psconsider_Hm
           »    False
6683  6692 Perf_Background_Dpkg.Pcspdtgttag                                                                                  Fmcs_Base_T
           » ypes.Cas
6684  6693 Perf_Background_Dpkg.Psfcuspd
           »      0.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 6685   6694 Perf_Background_Dpkg.Psfpatgt
             »      0.0
 6686   6695 Perf_Background_Dpkg.Psfpaact
             »    false
 6687   6696 Perf_Integration_Dpkg.Psvstgt
             »      0.0
 6688   6697 Perf_Background_Dpkg.Psvsact
             »    false
 6689   6698
 6690   6699
 6691   6700 OUTPUT                                                           EXPECTED                TOLERANCE              ACTUAL
             »          P/F
 6692   6701 ----------------------------------------------------  ----------------------------  -------------  ------------------
             » --------  ----
 6693   6702 Perf_Background_Dpkg.Pcholdflags.Hmactive                                    False          (N/A)
             »    FALSE  P
 6694   6703 Perf_Background_Dpkg.Pcholdflags.Hmdecel                                     False          (N/A)
             »    FALSE  P
 6695   6704 Perf_Background_Dpkg.Pcholdflags.Manhmwarn                                   False          (N/A)
             »    FALSE  P
 6696   6705 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                                   False          (N/A)
             »    FALSE  P
 6697   6706 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                                   False          (N/A)
             »    FALSE  P
 6698   6707 Perf_Background_Dpkg.Pcholdflags.Hmdistval                                   False          (N/A)
             »    FALSE  P
 6699   6708 Perf_Background_Dpkg.Pcholdflags.Consider_Hm                                  True          (N/A)
             »     TRUE  P
 6700   6709 Perf_Dpkg.Pshmdeleted                                                        False          (N/A)
             »    FALSE  P
 6701   6710 Perf_Background_Dpkg.Psconsider_Hm                                            True          (N/A)
             »     TRUE  P
 6702   6711 Perf_Background_Dpkg.Pcspdtgttag                                               CAS          (N/A)
             »      CAS  P
 6703   6712 Perf_Background_Dpkg.Psfcuspd                                                 0.0          0.001                    0.0
             » 0000E+00  P
 6704   6713 Perf_Background_Dpkg.Psfpatgt                                              /= 1.0          0.001                    0.0
             » 0000E+00  P
 6705   6714 Perf_Background_Dpkg.Psfpaact                                             /= true          (N/A)
             »    FALSE  P
 6706   6715 Perf_Integration_Dpkg.Psvstgt                                              /= 7.5          0.001                    0.0
             » 0000E+00  P
 6707   6716 Perf_Background_Dpkg.Psvsact                                              /= true          (N/A)
             »    FALSE  P
```

```
6708  6717
6709  6718
6710  6719 ====> All 15 Comparisons Passed <====
6711  6720
6712  6721
6713  6722 TESTID: 44
6714  6723 TC 44 verifies:
6715  6724 when Itinerary is Fuel_Plan_Fpln_Preds and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
6716  6725 the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Temporary, so, the Active F
           » light plan
6717  6726 is passed as input to the function.
6718  6727 also, when satisfy the following condition, Perf_Background_Dpkg.Use_Clb_Autodrt flag is set to true.
6719  6728 1) OPC Auto-Derate climb option activated set to True
6720  6729 2) Pilot selected Climb mode is Auto-Derate
6721  6730 3) Cruise altitude validity flag is set to True
6722  6731 4) Take-off gross weight validity flag is set to True
6723  6732 PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
6724  6733                    PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
6725  6734 When Perf_Background_Dpkg.Use_Clb_Autodrt flag is set to true, the procedure Perf_Int_Utils.Climb_Autodrt procedure
6726  6735 shall be called to compute the auto-derate outputs. Also, Perf_Background_Dpkg.Climb_Autodrt.Is_Valid is set to true.
6727  6736 PERF_SDD_07919 (PERF_SRD_12641)
6728  6737     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
6729  6738     SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
           » 70_INT,
6730  6739                               PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT
6731  6740
6732  6741
6733  6742 INPUT                                                                                                           VALUE
6734  6743 ----------------------------------------------------------------------------------------------------  ------------------
           » --------
6735  6744 Perf_Background_Dpkg.Flight_Plan_Type                                                                                 I
           » s_Active
6736  6745 Perf_Background_Dpkg.Pcitin.Itinerary                                                                       Fuel_Plan_Fp
           » ln_Preds
6737  6746 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
           »  Takeoff
6738  6747 Perf_Background_Dpkg.Pcactorsec                                                                                       T
           » emporary
6739  6748 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode                    Cdk_Entry_Tpkg.Aut
           » o_Derate
6740  6749 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode                        Cdk_Entry_
           » Tpkg.Clb
6741  6750 Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
           »     True
```

```
6742  6751 Perf_Background_Dpkg.Pscrzalt.Valid
           »     True
6743  6752 Perf_Dpkg.takeoff_gwt.valid
           »     True
6744  6753 Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Woendalt
           »   3500.0
6745  6754 Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Wos
           »      1.5
6746  6755 Ctp_A350_perf_Bkgnd_Get_Bk_Data.CTP_Dtflex
           »      2.0
6747  6756 Perf_Background_Dpkg.Use_Clb_Autodrt
           »    False
6748  6757 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid
           »    False
6749  6758 Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_End_Alt
           »      0.0
6750  6759 Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_Slope
           »      0.0
6751  6760 Perf_Background_Dpkg.Climb_Autodrt.Delta_T_Flex
           »      0.0
6752  6761
6753  6762
6754  6763  define Call_Auto_Derated_Climb_Mode   := false
6755  6764  define Call_Auto_Derated_Climb_Mode   := True
6756  6765  define Call_Climb_Autodrt   := false
6757  6766  define Call_Climb_Autodrt   := True
6758  6767  define Call_Auto_Derated_Climb_Mode   := True
6759  6768  define Call_Climb_Autodrt   := True
6760  6769
6761  6770
6762  6771 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
           »           P/F
6763  6772 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
6764  6773 Perf_Background_Dpkg.Use_Clb_Autodrt                                           True          (N/A)
           »     TRUE  P
6765  6774 Call_Auto_Derated_Climb_Mode                                                   True          (N/A)
           »     TRUE  P
6766  6775 Call_Climb_Autodrt                                                             True          (N/A)
           »     TRUE  P
6767  6776 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                                    True          (N/A)
           »     TRUE  P
6768  6777 Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_End_Alt                          3500.0          0.001                 3.5
           » 0000E+03  P
```

```
Perf_Background_Dpkg.Climb_Autodrt.Wash_Out_Slope                               1.5          0.001                1.5
» 0000E+00  P
Perf_Background_Dpkg.Climb_Autodrt.Delta_T_Flex                                 2.0          0.001                2.0
» 0000E+00  P


====> All 7 Comparisons Passed <====


TESTID: 45
TC 45 verifies:
when Itinerary is Current_Mode_Hi_Pri and the A/C is in Climb, pilot selected climb mode is obtained by calling
the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Secondary, so, the
current working flight plan is passed as input to the function.
also, In this case, condition (2) is not satisfied, Clb_Autodrt_mode is set to Cdk_Entry_Tpkg.Clb.
so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.

1) OPC Auto-Derate climb option activated set to True
2) Pilot selected Climb mode is Auto-Derate
3) Cruise altitude validity flag is set to True
4) Take-off gross weight validity flag is set to True
5) The A/C has not sequenced the initial TOC for Active Flight plan
PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
Perf_Background_Dpkg.Use_Clb_Autodrt flag is not true, so Perf_Int_Utils.Climb_Autodrt will not be called.
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid is set to false.
PERF_SDD_07919 (PERF_SRD_12641)
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
Perf_Background_Dpkg.Pcitin.Itinerary                                                                      Current_Mod
» e_Hi_Pri
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
»    Climb
Perf_Background_Dpkg.Pcactorsec                                                                                      S
» econdary
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
6805  6814 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode                   Cdk_Entry_Tpkg.Aut
           » o_Derate
6806  6815 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Secondary ).Autoderated_Climb_Mode                        Cdk_Entry_
           » Tpkg.Clb
6807  6816 Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
           »     True
6808  6817 Perf_Background_Dpkg.Pscrzalt.Valid
           »     True
6809  6818 Perf_Dpkg.takeoff_gwt.valid
           »     True
6810  6819 Perf_Background_Dpkg.Use_Clb_Autodrt
           »    False
6811  6820 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid
           »     True
6812  6821
6813  6822
6814  6823  define Call_Auto_Derated_Climb_Mode   := false
6815  6824  define Call_Auto_Derated_Climb_Mode   := True
6816  6825  define Call_Climb_Autodrt   := false
6817  6826  define Call_Climb_Autodrt   := True
6818  6827  define Call_Auto_Derated_Climb_Mode   := True
6819  6828
6820  6829
6821  6830 OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
           »           P/F
6822  6831 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
6823  6832 Perf_Background_Dpkg.Use_Clb_Autodrt                                              False          (N/A)
           »    FALSE  P
6824  6833 Call_Auto_Derated_Climb_Mode                                                       True          (N/A)
           »     TRUE  P
6825  6834 Call_Climb_Autodrt                                                                False          (N/A)
           »    FALSE  P
6826  6835 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                                       False          (N/A)
           »    FALSE  P
6827  6836
6828  6837
6829  6838 ====> All 4 Comparisons Passed <====
6830  6839
6831  6840
6832  6841 TESTID: 46
6833  6842 TC 46 verifies:
6834  6843 when Itinerary is Prim_Fpln_Preds and the A/C is in Climb, pilot selected climb mode is obtained by calling
6835  6844 the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Temporary, so, the Active F
```

```
» light plan
is passed as input to the function.
also, In this case, condition (1) is not satisfied, Auto_Derate_Climb_Enable is set to False.
so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.

1) OPC Auto-Derate climb option activated set to True
2) Pilot selected Climb mode is Auto-Derate
3) Cruise altitude validity flag is set to True
4) Take-off gross weight validity flag is set to True
5) The A/C has not sequenced the initial TOC for Active Flight plan
PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
                   PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
Perf_Background_Dpkg.Use_Clb_Autodrt flag is not true, so Perf_Int_Utils.Climb_Autodrt will not be called.
PERF_SDD_07919 (PERF_SRD_12641)
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
Perf_Background_Dpkg.Pcitin.Itinerary                                                                          Prim_Fp
» ln_Preds
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
»    Climb
Perf_Background_Dpkg.Pcactorsec                                                                                      T
» emporary
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode                    Cdk_Entry_Tpkg.Aut
» o_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode                         Cdk_Entry_
» Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
»    False
Perf_Background_Dpkg.Pscrzalt.Valid
»     True
Perf_Dpkg.takeoff_gwt.valid
»     True
Perf_Background_Dpkg.Use_Clb_Autodrt
»    False

```

```
6867  6876
6868  6877  define Call_Auto_Derated_Climb_Mode   := false
6869  6878  define Call_Auto_Derated_Climb_Mode   := True
6870  6879  define Call_Climb_Autodrt   := false
6871  6880  define Call_Climb_Autodrt   := True
6872  6881  define Call_Auto_Derated_Climb_Mode   := True
6873  6882
6874  6883
6875  6884 OUTPUT                                                          EXPECTED              TOLERANCE              ACTUAL
           »           P/F
6876  6885 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
6877  6886 Perf_Background_Dpkg.Use_Clb_Autodrt                                          False          (N/A)
           »    FALSE  P
6878  6887 Call_Auto_Derated_Climb_Mode                                                   True          (N/A)
           »     TRUE  P
6879  6888 Call_Climb_Autodrt                                                            False          (N/A)
           »    FALSE  P
6880  6889
6881  6890
6882  6891 ====> All 3 Comparisons Passed <====
6883  6892
6884  6893
6885  6894 TESTID: 47
6886  6895 TC 47 verifies:
6887  6896 when Itinerary is Current_Mode_Preds and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
6888  6897 the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Active, so, the Active Flig
           » ht plan
6889  6898 is passed as input to the function.
6890  6899 also, In this case, condition (3) is not satisfied, Perf_Background_Dpkg.Pscrzalt.Valid is set to False.
6891  6900 so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.
6892  6901
6893  6902 1) OPC Auto-Derate climb option activated set to True
6894  6903 2) Pilot selected Climb mode is Auto-Derate
6895  6904 3) Cruise altitude validity flag is set to True
6896  6905 4) Take-off gross weight validity flag is set to True
6897  6906 5) The A/C has not sequenced the initial TOC for Active Flight plan
6898  6907 PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
6899  6908                    PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
6900  6909 Perf_Background_Dpkg.Use_Clb_Autodrt flag is not true, so Perf_Int_Utils.Climb_Autodrt will not be called.
6901  6910 PERF_SDD_07919 (PERF_SRD_12641)
6902  6911     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
6903  6912     SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
           » 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
Perf_Background_Dpkg.Pcitin.Itinerary                                                                       Current_Mo
» de_Preds
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
»  Takeoff
Perf_Background_Dpkg.Pcactorsec
»   Active
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode                    Cdk_Entry_Tpkg.Aut
» o_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode                         Cdk_Entry_
» Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
»     True
Perf_Dpkg.takeoff_gwt.valid
»     True
Perf_Background_Dpkg.Use_Clb_Autodrt
»    False


 define Call_Auto_Derated_Climb_Mode   := false
 define Call_Auto_Derated_Climb_Mode   := True


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pscrzalt.Valid
»    False


 define Call_Climb_Autodrt   := false
 define Call_Climb_Autodrt   := True
 define Call_Auto_Derated_Climb_Mode   := True


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
```

```
            » --------
6936  6945  Perf_Background_Dpkg.Pscrzalt.Valid
            »    False
6937  6946
6938  6947
6939  6948  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
6940  6949  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
6941  6950  Perf_Background_Dpkg.Use_Clb_Autodrt                                          False          (N/A)
            »    FALSE  P
6942  6951  Call_Auto_Derated_Climb_Mode                                                   True          (N/A)
            »     TRUE  P
6943  6952  Call_Climb_Autodrt                                                            False          (N/A)
            »    FALSE  P
6944  6953
6945  6954
6946  6955  ====> All 3 Comparisons Passed <====
6947  6956
6948  6957
6949  6958  TESTID: 48
6950  6959  TC 48 verifies:
6951  6960  when Itinerary is Fuel_Plan_Fpln_Preds and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
6952  6961  the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Active, so, the Active Flig
            » ht plan
6953  6962  is passed as input to the function.
6954  6963  also, In this case, condition (4) is not satisfied, Perf_Dpkg.Takeoff_Gwt.Valid is set to False.
6955  6964  so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.
6956  6965
6957  6966  1) OPC Auto-Derate climb option activated set to True
6958  6967  2) Pilot selected Climb mode is Auto-Derate
6959  6968  3) Cruise altitude validity flag is set to True
6960  6969  4) Take-off gross weight validity flag is set to True
6961  6970  5) The A/C has not sequenced the initial TOC for Active Flight plan
6962  6971  PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
6963  6972                     PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
6964  6973  Perf_Background_Dpkg.Use_Clb_Autodrt flag is not true, so Perf_Int_Utils.Climb_Autodrt will not be called.
6965  6974  PERF_SDD_07919 (PERF_SRD_12641)
6966  6975      REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
6967  6976      SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
            » 70_INT,
6968  6977                                PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT
6969  6978
6970  6979
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
6971  6980  INPUT                                                                                                          VALUE
6972  6981  --------------------------------------------------------------------------------------------------  ------------------
            » --------
6973  6982  Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
            » s_Active
6974  6983  Perf_Background_Dpkg.Pcitin.Itinerary                                                                     Fuel_Plan_Fp
            » ln_Preds
6975  6984  Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
            »  Takeoff
6976  6985  Perf_Background_Dpkg.Pcactorsec
            »   Active
6977  6986  Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode                    Cdk_Entry_Tpkg.Aut
            » o_Derate
6978  6987  Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode                         Cdk_Entry_
            » Tpkg.Clb
6979  6988  Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
            »     True
6980  6989  Perf_Background_Dpkg.Pscrzalt.Valid
            »     True
6981  6990  Perf_Dpkg.takeoff_gwt.valid
            »    False
6982  6991  Perf_Background_Dpkg.Use_Clb_Autodrt
            »    False
6983  6992
6984  6993
6985  6994   define Call_Auto_Derated_Climb_Mode   := false
6986  6995   define Call_Auto_Derated_Climb_Mode   := True
6987  6996   define Call_Climb_Autodrt   := false
6988  6997   define Call_Climb_Autodrt   := True
6989  6998   define Call_Auto_Derated_Climb_Mode   := True
6990  6999
6991  7000
6992  7001  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
6993  7002  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
6994  7003  Perf_Background_Dpkg.Use_Clb_Autodrt                                          False          (N/A)
            »    FALSE  P
6995  7004  Call_Auto_Derated_Climb_Mode                                                   True          (N/A)
            »     TRUE  P
6996  7005  Call_Climb_Autodrt                                                            False          (N/A)
            »    FALSE  P
6997  7006
6998  7007
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
6999  7008 ====> All 3 Comparisons Passed <====
7000  7009
7001  7010
7002  7011 TESTID: 49
7003  7012 TC 49 verifies:
7004  7013 when Itinerary is Current_Mode_Hi_Pri and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
7005  7014 the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Active, so, the Active Flig
           » ht plan
7006  7015 is passed as input to the function. Also, In this case, the following conditions are satisfied
7007  7016 (especially, the A/C has not sequenced the initial TOC for Active Flight plan )
7008  7017 so, Perf_Background_Dpkg.Use_Clb_Autodrt will be set to true.
7009  7018
7010  7019 1) OPC Auto-Derate climb option activated set to True
7011  7020 2) Pilot selected Climb mode is Auto-Derate
7012  7021 3) Cruise altitude validity flag is set to True
7013  7022 4) Take-off gross weight validity flag is set to True
7014  7023 5) The A/C has not sequenced the initial TOC for Active Flight plan
7015  7024 PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
7016  7025                    PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
7017  7026 Perf_Background_Dpkg.Use_Clb_Autodrt flag is set to true, so Perf_Int_Utils.Climb_Autodrt
7018  7027 will be called to compute the auto-derate outputs.
7019  7028 PERF_SDD_07919 (PERF_SRD_12641)
7020  7029     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
7021  7030     SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
           » 70_INT,
7022  7031                               PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT
7023  7032
7024  7033
7025  7034 INPUT                                                                                                                  VALUE
7026  7035 ----------------------------------------------------------------------------------------------------  ------------------
           » --------
7027  7036 Perf_Background_Dpkg.Flight_Plan_Type                                                                                      I
           » s_Active
7028  7037 Perf_Background_Dpkg.Pcitin.Itinerary                                                                            Current_Mod
           » e_Hi_Pri
7029  7038 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
           »  Takeoff
7030  7039 Perf_Background_Dpkg.Pcactorsec
           »   Active
7031  7040 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode                       Cdk_Entry_Tpkg.Aut
           » o_Derate
7032  7041 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode                           Cdk_Entry_
           » Tpkg.Clb
7033  7042 Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
```

```
                 »     True
 7034   7043 Perf_Background_Dpkg.Pscrzalt.Valid
                 »     True
 7035   7044 Perf_Dpkg.takeoff_gwt.valid
                 »     True
 7036   7045 Perf_Background_Dpkg.Psseqtoc
                 »    False
 7037   7046 Perf_Background_Dpkg.Use_Clb_Autodrt
                 »    False
 7038   7047
 7039   7048
 7040   7049  define Call_Auto_Derated_Climb_Mode   := false
 7041   7050  define Call_Auto_Derated_Climb_Mode   := True
 7042   7051  define Call_Climb_Autodrt   := false
 7043   7052  define Call_Climb_Autodrt   := True
 7044   7053  define Call_Auto_Derated_Climb_Mode   := True
 7045   7054  define Call_Climb_Autodrt   := True
 7046   7055
 7047   7056
 7048   7057 OUTPUT                                                         EXPECTED                 TOLERANCE              ACTUAL
                 »           P/F
 7049   7058 ----------------------------------------------------  -----------------------------  -------------  ------------------
                 » --------  ----
 7050   7059 Perf_Background_Dpkg.Use_Clb_Autodrt                                          True          (N/A)
                 »     TRUE  P
 7051   7060 Call_Auto_Derated_Climb_Mode                                                  True          (N/A)
                 »     TRUE  P
 7052   7061 Call_Climb_Autodrt                                                            True          (N/A)
                 »     TRUE  P
 7053   7062
 7054   7063
 7055   7064 ====> All 3 Comparisons Passed <====
 7056   7065
 7057   7066
 7058   7067 TESTID: 50
 7059   7068 TC 50 verifies:
 7060   7069 when Itinerary is Prim_Fpln_Preds and the A/C is in Takeoff, pilot selected climb mode is obtained by calling
 7061   7070 the function Cdk_Vert_Dpkg.Auto_Derated_Climb_Mode, and the current working flight plan is Active, so, the Active Flig
                 » ht plan
 7062   7071 is passed as input to the function.
 7063   7072 also, In this case, condition (5) is not satisfied, The A/C has sequenced the initial TOC for Active Flight plan
 7064   7073 (Perf_Background_Dpkg.Psseqtoc is true)
 7065   7074 so, Perf_Background_Dpkg.Use_Clb_Autodrt will not be set to true.
 7066   7075
 7067   7076 1) OPC Auto-Derate climb option activated set to True
 7068   7077 2) Pilot selected Climb mode is Auto-Derate
 7069   7078 3) Cruise altitude validity flag is set to True
 7070   7079 4) Take-off gross weight validity flag is set to True
 7071   7080 5) The A/C has not sequenced the initial TOC for Active Flight plan
 7072   7081 PERF_SDD_07956(PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_12670_INT,
 7073   7082                    PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT)
 7074   7083 Perf_Background_Dpkg.Use_Clb_Autodrt flag is not set to true, so Perf_Int_Utils.Climb_Autodrt
 7075   7084 will not be called to compute the auto-derate outputs. Perf_Background_Dpkg.Climb_Autodrt.Is_Valid is set to false.
 7076   7085 PERF_SDD_07919 (PERF_SRD_12641)
 7077   7086     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
 7078   7087     SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
             » 70_INT,
 7079   7088                               PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT
 7080   7089 
 7081   7090 
 7082   7091 INPUT                                                                                                   VALUE
 7083   7092 ---------------------------------------------------------------------------------------------------  ------------------
             » --------
 7084   7093 Perf_Background_Dpkg.Flight_Plan_Type                                                                          I
             » s_Active
 7085   7094 Perf_Background_Dpkg.Pcitin.Itinerary                                                                    Prim_Fp
             » ln_Preds
 7086   7095 Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
             »  Takeoff
 7087   7096 Perf_Background_Dpkg.Pcactorsec
             »   Active
 7088   7097 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode                   Cdk_Entry_Tpkg.Aut
             » o_Derate
 7089   7098 Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode                        Cdk_Entry_
             » Tpkg.Clb
 7090   7099 Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
             »     True
 7091   7100 Perf_Background_Dpkg.Pscrzalt.Valid
             »     True
 7092   7101 Perf_Dpkg.takeoff_gwt.valid
             »     True
 7093   7102 Perf_Background_Dpkg.Psseqtoc
             »     True
 7094   7103 Perf_Background_Dpkg.Use_Clb_Autodrt
             »     True
 7095   7104 Perf_Background_Dpkg.Climb_Autodrt.Is_Valid
             »     True
 7096   7105 

 define Call_Auto_Derated_Climb_Mode   := false
 define Call_Auto_Derated_Climb_Mode   := True
 define Call_Climb_Autodrt   := false
 define Call_Climb_Autodrt   := True
 define Call_Auto_Derated_Climb_Mode   := True


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Use_Clb_Autodrt                                          False          (N/A)
»    FALSE  P
Call_Auto_Derated_Climb_Mode                                                   True          (N/A)
»     TRUE  P
Call_Climb_Autodrt                                                            False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Climb_Autodrt.Is_Valid                                   False          (N/A)
»    FALSE  P


====> All 4 Comparisons Passed <====


TESTID: 51
TC 51 verifies when current itinerary is Fuel_Plan_Stage2, and the A/C is in Takeoff, FM will not Compute Climb Auto D
» erate.
Perf_Background_Dpkg.Use_Clb_Autodrt flag is not set to true, so Perf_Int_Utils.Climb_Autodrt
will not be called to compute the auto-derate outputs.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07956, PERF_SDD_07919
    SUPPORTING REQUIREMENTS : PERF_SRD_12641, PERF_SRD_12667_INT, PERF_SRD_12668_INT, PERF_SRD_12669_INT, PERF_SRD_126
» 70_INT,
                              PERF_SRD_12671_INT, PERF_SRD_12672_INT, PERF_SRD_12673_INT


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
Perf_Background_Dpkg.Pcitin.Itinerary                                                                         Fuel_Pla
» n_Stage2
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
Ctp_A350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase
»  Takeoff
Perf_Background_Dpkg.Pcactorsec
»   Active
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Active ).Autoderated_Climb_Mode                    Cdk_Entry_Tpkg.Aut
» o_Derate
Cdk_Vert_Dpkg:body.Fpln_Data( Fprequestrec_Types.Temporary ).Autoderated_Climb_Mode                         Cdk_Entry_
» Tpkg.Clb
Options_And_Data_Pkg.All_Options.Auto_Derate_Climb_Enable
»     True
Perf_Background_Dpkg.Pscrzalt.Valid
»     True
Perf_Dpkg.takeoff_gwt.valid
»     True
Perf_Background_Dpkg.Psseqtoc
»     True
Perf_Background_Dpkg.Use_Clb_Autodrt
»     True


 define Call_Auto_Derated_Climb_Mode   := false
 define Call_Auto_Derated_Climb_Mode   := True
 define Call_Climb_Autodrt   := false
 define Call_Climb_Autodrt   := True


OUTPUT                                                           EXPECTED                TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Use_Clb_Autodrt                                            False          (N/A)
»    FALSE  P
Call_Auto_Derated_Climb_Mode                                                    False          (N/A)
»    FALSE  P
Call_Climb_Autodrt                                                              False          (N/A)
»    FALSE  P


====> All 3 Comparisons Passed <====


TESTID: 52

    And if the VG CAS is less than V2+10 and the flight phase is less than or equal to climb then VG CAS is set to V2+
» 10 speed.
    If the previous non-envelope-limited target speed is not set to current VG MACH then previous non-envelope-limited
»  target speed
    shall be set to the current VG CAS target and the previous CAS/Mach speed indicator is set to indicate CAS speed t
» ype.
    Here set VG CAS is large than V2+10 and flight phase is Preflight, previous CAS/Mach speed indicator is CAS.
    PERF_SDD_3053_INT


INPUT                                                                                                         VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
»    False
CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
»    False
CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data
»     True
CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data
»     True
Perf_Dpkg.Min_Gwt
»    100.0
Perf_Dpkg.Max_Gwt
»    400.0
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
Perf_Background_Dpkg.Psignorehm
»     True
Perf_Background_Dpkg.Pcfltphase                                                                                      P
» reflight
Perf_Background_Dpkg.Ats_Enable
»     True
```

```
7184  7193 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase                         P
           » reflight
7185  7194 Perf_Background_Dpkg.Psacalt
           »  10000.0
7186  7195 Perf_Database_Dpkg.Psmmo
           »     0.45
7187  7196 Perf_Background_Dpkg.Pszfw
           »    300.0
7188  7197 Perf_Background_Dpkg.Psblockfuel
           »     50.0
7189  7198 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
7190  7199 Perf_Background_Dpkg.Psairborne
           »     True
7191  7200 Perf_Background_Dpkg.Psautolat
           »    False
7192  7201 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
7193  7202 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
7194  7203 Perf_Background_Dpkg.Psengout
           »    False
7195  7204 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     True
7196  7205 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
7197  7206 Perf_Dpkg.Repredict_Hm_Decel
           »     True
7198  7207 Perf_Background_DPkg.Pshmdecel
           »     True
7199  7208 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
7200  7209 Perf_Ads_Dpkg.Fi_Enabled
           »    False
7201  7210 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
7202  7211 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
7203  7212 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
7204  7213 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
7205  7214 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 7206   7215 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
             »     True
 7207   7216 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
             »     True
 7208   7217 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
             »     True
 7209   7218 Perf_Background_Dpkg.Psappspdlat
             »     True
 7210   7219 Perf_Dpkg.Pcengoutprds
             »   Altpln
 7211   7220 Guid_Ext_Dpkg.Va3lcautoctl
             »     True
 7212   7221 Perf_Background_Dpkg.Psvgonpath
             »    False
 7213   7222 Perf_Background_Dpkg.Pcpathref
             »   Onpath
 7214   7223 Guid_Ext_Dpkg.Va3Vertmde                                                                                                   Perf_Ext_Tp
             » kg.Vmspd
 7215   7224 Perf_Background_DPkg.Pscurcas
             »      5.0
 7216   7225 Perf_Background_DPkg.Pscurmach
             »      5.0
 7217   7226 Perf_Background_DPkg.Pscurtas
             »      5.0
 7218   7227 Perf_Despath_Dpkg.Pcdespath.Vgavalid
             »     True
 7219   7228 Perf_Background_Dpkg.Pstogwtval
             »    False
 7220   7229 Perf_Background_Dpkg.Pstogwt
             »     50.0
 7221   7230 Perf_Background_Dpkg.Pcgwind
             »  Invalid
 7222   7231 Perf_Background_Dpkg.Psgw
             »      0.0
 7223   7232 Perf_Dpkg.Gross_Weight.Status
             »    Valid
 7224   7233 Perf_Dpkg.Gross_Weight.Data
             »    150.0
 7225   7234 Perf_Integration_DPkg.Pcairbrakes
             »   Fullab
 7226   7235 Perf_Background_Dpkg.Pcacconfig
             »        5
 7227   7236 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
             »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
7228  7237 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
           »   9000.0
7229  7238 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
           »    200.0
7230  7239 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
7231  7240 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
7232  7241 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
7233  7242 Perf_Background_Dpkg.Psstpclbact
           »     True
7234  7243 Perf_Background_Dpkg.Psstpdesact
           »     True
7235  7244 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
7236  7245 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
           »      0.0
7237  7246 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
           »     0.65
7238  7247 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
7239  7248 Perf_Background_Dpkg.Pccuraltcstr.Valid
           »     True
7240  7249 Perf_Background_Dpkg.Pcprebcalt.Valid
           »     True
7241  7250 Perf_Background_Dpkg.Pcgmttime.Hour
           »        1
7242  7251 Perf_Background_Dpkg.Pcgmttime.Minute
           »        1
7243  7252 Perf_Background_Dpkg.Pcgmttime.Second
           »        1
7244  7253 Perf_Background_Dpkg.Psinertvs
           »      5.0
7245  7254 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
           »        0
7246  7255 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
           »        2
7247  7256 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
           »        0
7248  7257 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
           »        2
7249  7258 Perf_Ads_Dpkg.Pr_Enabled
           »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
  7250   7259 ATC_DISCRETES_PKG:body.Adson_Flag
              »    False
  7251   7260 Perf_Integration_Dpkg.Psoldnoentgt
              »      1.0
  7252   7261 Perf_Background_Dpkg.Pcoldcasmchi                                                                         Fmcs_Base_Ty
              » pes.Mach
  7253   7262 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET_VALID
              »     true
  7254   7263 CTP_A350_PERF_BKGND_GET_BK_DATA.DATA_SET
              »     true
  7255   7264 ^Noise_End_Alt_Status                                                                                 Takeoff_Alt_Type
              » s.Active
  7256   7265 ^Noise_Speed_Val
              »     True
  7257   7266 Perf_Background_Dpkg.Pcitin.Itinerary                                                                     Fuel_Plan_Fp
              » ln_Preds
  7258   7267 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
              »    False
  7259   7268 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
              »    False
  7260   7269 Perf_Background_Dpkg.Psv2plus10
              »     -1.0
  7261   7270 Perf_Dpkg.takeoff_gwt.valid
              »     True
  7262   7271 Perf_Dpkg.takeoff_gwt.data
              »    400.0
  7263   7272
  7264   7273
  7265   7274 OUTPUT                                                          EXPECTED               TOLERANCE             ACTUAL
              »           P/F
  7266   7275 ----------------------------------------------------  -----------------------------  -------------  ------------------
              » --------  ----
  7267   7276 Perf_Integration_Dpkg.Psoldnoentgt                                              0.0          0.001                 0.0
              » 0000E+00  P
  7268   7277 Perf_Background_Dpkg.Pcoldcasmchi                                               Cas          (N/A)
              »      CAS  P
  7269   7278
  7270   7279
  7271   7280 ====> All 2 Comparisons Passed <====
  7272   7281
  7273   7282
  7274   7283 TESTID: 53
  7275   7284
  7276   7285 When following conditions are met:
```

```
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1,2,3 are satisfied, DES SPD LIM Perf leg is not Included, Perf_Buffer.Getperfleg procedure will be call
» ed and
Optimum Descent CAS will not be set.
PERF_SDD_08158_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                            VALUE
-------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                               I
» s_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Psairborne
»    False
Guid_Spds_Dpkg.Vc3prtlimcas
»      0.0
Perf_Background_Dpkg.Pcactorsec                                                                                     T
» emporary
Perf_Background_Dpkg.Psdeslimspdchg
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
»     True
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
»    False
Perf_Dpkg.Psfrstactprd
```

```
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»    False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included
»    False
Perf_Background_Dpkg.Pcitin.Flight_Plan                                                                                 T
» emporary
Perf_Background_Dpkg.Pcitin.Itinerary                                                                             Prim_Fp
» ln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
»    False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0


OUTPUT                                                         EXPECTED                TOLERANCE             ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                          0.0          0.001                 0.0
» 0000E+00  P
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE                                True          (N/A)
»     TRUE  P


====> All 2 Comparisons Passed <====


TESTID: 54

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1 is not satisfied, Perf_Buffer.Getperfleg procedure will not be called and
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
7343  7352 Optimum Descent CAS will not be set.
7344  7353 PERF_SDD_08158_INT
7345  7354
7346  7355 When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
           »  set to False.
7347  7356 1. First Preds After Insert Temporary indication is True or
7348  7357 2. The descent speed limit has not been latched or
7349  7358 3. The temporary flight plan does not exist.
7350  7359
7351  7360 Here verify condition (the flag Psdeslimspdchg is set) is not satisfied, Psdeslimspdchg will not be set.
7352  7361 PERF_SDD_08159_INT
7353  7362
7354  7363     REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT, PERF_SDD_08159_INT
7355  7364
7356  7365     SUPPORTING REQUIREMENTS : N/A
7357  7366
7358  7367
7359  7368 INPUT                                                                                                          VALUE
7360  7369 --------------------------------------------------------------------------------------------------  ------------------
           » --------
7361  7370 Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
           » s_Active
7362  7371 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »  Descent
7363  7372 Perf_Background_Dpkg.Pcfltphase
           »  Descent
7364  7373 Perf_Background_Dpkg.Psairborne
           »    False
7365  7374 Guid_Spds_Dpkg.Vc3prtlimcas
           »      0.0
7366  7375 Perf_Background_Dpkg.Pcactorsec                                                                                      T
           » emporary
7367  7376 Perf_Background_Dpkg.Psdeslimspdchg
           »    False
7368  7377 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
           »     True
7369  7378 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
           »    False
7370  7379 Perf_Dpkg.Psfrstactprd
           »    False
7371  7380 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
           »    False
7372  7381 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included
           »    False
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
7373  7382 Perf_Background_Dpkg.Pcitin.Flight_Plan                                                                 T
           » emporary
7374  7383 Perf_Background_Dpkg.Pcitin.Itinerary                                                             Prim_Fp
           » ln_Preds
7375  7384 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
           »    False
7376  7385 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
           »      0.0
7377  7386
7378  7387
7379  7388 OUTPUT                                                     EXPECTED                TOLERANCE            ACTUAL
           »           P/F
7380  7389 ----------------------------------------------------  ----------------------------  -------------  ------------------
           » --------  ----
7381  7390 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                             0.0          0.001                  0.0
           » 0000E+00  P
7382  7391 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE                  False          (N/A)
           »    FALSE  P
7383  7392 Perf_Background_Dpkg.Psdeslimspdchg                                  False          (N/A)
           »    FALSE  P
7384  7393
7385  7394
7386  7395 ====> All 3 Comparisons Passed <====
7387  7396
7388  7397
7389  7398 TESTID: 55
7390  7399
7391  7400 When following conditions are met:
7392  7401 1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
7393  7402 2. the descent speed limit is latched
7394  7403 3. the flight plan is Temporary,
7395  7404 4. the flight phase is descent
7396  7405 then the following shall be done:
7397  7406 i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
7398  7407 ii) If the DES SPD LIM Perf leg is Included, then
7399  7408 If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
7400  7409  Optimum Descent CAS is set to the VG Partially-Limited CAS
7401  7410 Otherwise,
7402  7411  Optimum Descent CAS is set to the DES SPD LIM speed.
7403  7412
7404  7413 Here conditon 2 is not satisfied, Perf_Buffer.Getperfleg procedure will not be called and
7405  7414 Optimum Descent CAS will not be set.
7406  7415 PERF_SDD_08158_INT
7407  7416
```

```
When the flag Psdeslimspdchg is set and any of the following conditions is true, then the flag Psdeslimspdchg shall be
»  set to False.
1. First Preds After Insert Temporary indication is True or
2. The descent speed limit has not been latched or
3. The temporary flight plan does not exist.

Here verify condition 2 (descent speed limit has not been latched) is  satisfied, Psdeslimspdchg will  be set to False
» .
PERF_SDD_08159_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT, PERF_SDD_08159_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                             VALUE
----------------------------------------------------------------------------------------------------  -----------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                 I
» s_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Psairborne
»    False
Guid_Spds_Dpkg.Vc3prtlimcas
»      0.0
Perf_Background_Dpkg.Pcactorsec                                                                                       T
» emporary
Perf_Background_Dpkg.Psdeslimspdchg
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
»    False
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
»     True
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»    False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included
»    False
Perf_Background_Dpkg.Pcitin.Flight_Plan                                                                               T
» emporary
```

```
Perf_Background_Dpkg.Pcitin.Itinerary                                                                          Prim_Fp
» ln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
»    False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0


OUTPUT                                                          EXPECTED               TOLERANCE             ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                          0.0          0.001                0.0
» 0000E+00  P
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE                               False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Psdeslimspdchg                                              False          (N/A)
»    FALSE  P


====> All 3 Comparisons Passed <====


TESTID: 56

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
Otherwise,
  Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1,2,3 are satisfied, DES SPD LIM Perf leg is Included, the VG Partially-Limited CAS is zero,
Perf_Buffer.Getperfleg procedure will be called and Optimum Descent CAS will be set to DES SPD LIM speed.
PERF_SDD_08158_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Psairborne
»    False
Guid_Spds_Dpkg.Vc3prtlimcas
»      0.0
Perf_Background_Dpkg.Pcactorsec                                                                                      T
» emporary
Perf_Background_Dpkg.Psdeslimspdchg
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
»     True
FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
»    False
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»    False
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included
»     True
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Spd
»    160.0
Perf_Background_Dpkg.Pcpredcount(Temporary)
»        1
Perf_Background_Dpkg.Pcitin.Flight_Plan                                                                              T
» emporary
Perf_Background_Dpkg.Pcitin.Itinerary                                                                          Prim_Fp
» ln_Preds
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
»    False
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0


```

```
OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                    160.0          0.001                 1.6
» 0000E+02  P
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE                            True          (N/A)
»     TRUE  P


====> All 2 Comparisons Passed <====


TESTID: 57

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
 If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
 Otherwise,
 Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1,2,3 are satisfied, DES SPD LIM Perf leg is Included, the VG Partially-Limited CAS is not zero, and
the predictions count is less than or equal to one, verify Perf_Buffer.Getperfleg procedure will be called and
Optimum Descent CAS will be set to the VG Partially-Limited CAS
PERF_SDD_08158_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
```

```
                 »  Descent
 7535   7544  Perf_Background_Dpkg.Pcfltphase
              »  Descent
 7536   7545  Perf_Background_Dpkg.Psairborne
              »    False
 7537   7546  Guid_Spds_Dpkg.Vc3prtlimcas
              »      1.0
 7538   7547  Perf_Background_Dpkg.Pcactorsec                                                                     T
              » emporary
 7539   7548  Perf_Background_Dpkg.Psdeslimspdchg
              »     True
 7540   7549  Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
              »     True
 7541   7550  FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
              »    False
 7542   7551  Perf_Dpkg.Psfrstactprd
              »    False
 7543   7552  Perf_Dpkg.Insrt_Tmpy_Frst_Preds
              »    False
 7544   7553  Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included
              »     True
 7545   7554  Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Spd
              »    160.0
 7546   7555  Perf_Background_Dpkg.Pcpredcount(Temporary)
              »        1
 7547   7556  Perf_Background_Dpkg.Psautolat
              »     True
 7548   7557  Perf_Background_Dpkg.Psappspdlat
              »    False
 7549   7558  Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
              »    False
 7550   7559  Perf_Background_Dpkg.Pcitin.Flight_Plan                                                             T
              » emporary
 7551   7560  Perf_Background_Dpkg.Pcitin.Itinerary                                                         Prim_Fp
              » ln_Preds
 7552   7561  Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
              »    False
 7553   7562  Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
              »      0.0
 7554   7563
 7555   7564
 7556   7565  OUTPUT                                                 EXPECTED              TOLERANCE           ACTUAL
              »           P/F
 7557   7566  ---------------------------------------------------- ---------------------------- ------------ ------------------
```

```
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                       1.0          0.001                 1.0
» 0000E+00  P
Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE                             True          (N/A)
»     TRUE  P


====> All 2 Comparisons Passed <====


TESTID: 58

When following conditions are met:
1.the flag indicating DES SPD LIM change (Psdeslimspdchg) is set
2. the descent speed limit is latched
3. the flight plan is Temporary,
4. the flight phase is descent
then the following shall be done:
i) The DES SPD LIM perf leg is obtained for the temporary flight plan by calling the Perf_Buffer.Getperfleg procedure.
ii) If the DES SPD LIM Perf leg is Included, then
 If the VG Partially-Limited CAS is non-zero, and the predictions count is less than or equal to one then,
 Optimum Descent CAS is set to the VG Partially-Limited CAS
 Otherwise,
 Optimum Descent CAS is set to the DES SPD LIM speed.

Here conditon 1,2,3 are satisfied, DES SPD LIM Perf leg is Included, the VG Partially-Limited CAS is not zero, and
the predictions count is larger than to one, verify Perf_Buffer.Getperfleg procedure will be called and
Optimum Descent CAS will be set to DES SPD LIM speed.
PERF_SDD_08158_INT

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_08158_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                         VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 7595   7604 Perf_Background_Dpkg.Psairborne
             »    False
 7596   7605 Guid_Spds_Dpkg.Vc3prtlimcas
             »      1.0
 7597   7606 Perf_Background_Dpkg.Pcactorsec                                                                               T
             » emporary
 7598   7607 Perf_Background_Dpkg.Psdeslimspdchg
             »     True
 7599   7608 Guid_Checkpoint_Resynch_Dpkg.Vc3deslimlat.Spdlim
             »     True
 7600   7609 FPLN_RESYNC_DPKG:body.Fpln_Ext_Data.Tmpy_Exists
             »    False
 7601   7610 Perf_Dpkg.Psfrstactprd
             »    False
 7602   7611 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
             »    False
 7603   7612 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Included
             »     True
 7604   7613 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg.Spd
             »    160.0
 7605   7614 Perf_Background_Dpkg.Pcpredcount(Temporary)
             »        3
 7606   7615 Perf_Background_Dpkg.Psautolat
             »     True
 7607   7616 Perf_Background_Dpkg.Psappspdlat
             »    False
 7608   7617 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
             »    False
 7609   7618 Perf_Background_Dpkg.Pcitin.Flight_Plan                                                                      T
             » emporary
 7610   7619 Perf_Background_Dpkg.Pcitin.Itinerary                                                                  Prim_Fp
             » ln_Preds
 7611   7620 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE
             »    False
 7612   7621 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
 7613   7622
 7614   7623
 7615   7624 OUTPUT                                                         EXPECTED              TOLERANCE            ACTUAL
             »          P/F
 7616   7625 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 7617   7626 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                    160.0          0.001               1.6
             » 0000E+02  P
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 7618   7627 Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE                                 True          (N/A)
             »     TRUE  P
 7619   7628
 7620   7629
 7621   7630 ====> All 2 Comparisons Passed <====
 7622   7631
 7623   7632
 7624   7633 TESTID: 59
 7625   7634     If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
             » s are on,
 7626   7635     the aircraft gross weight shall be set to any one of the following:
 7627   7636    - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
             » craft
 7628   7637      gross weight and Take Off gross weight being valid
 7629   7638    - Aircraft GW from the Performance Weights function,  if the flight phase is other
 7630   7639      than takeoff or before, or the aircraft gross weight or the Take Off gross weight
 7631   7640      being invalid
 7632   7641     The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
 7633   7642     PERF_SDD_07501_INT
 7634   7643     --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is Secondary,engines
             »  are on,
 7635   7644     --the flight phase is Preflight,and the aircraftgross weight and Take Off gross weight being valid
 7636   7645     --then Aircraft Takeoff GW from the Performance Weights function
 7637   7646
 7638   7647     If the current itinerary is neither Current Mode Predictions (Normal or High priority)
 7639   7648     nor Pred_to_alt itinerary, then the vertical mode(Pcvertmode) shall be set to Econ mode.
 7640   7649     PERF_SDD_07506(PERF_SRD_6192)
 7641   7650     --in this test case, the current itinerary is Pred_To_Alt_Preds
 7642   7651     Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
 7643   7652     are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
             » d to FL250.
 7644   7653     PERF_SDD_07543_INT
 7645   7654     --in this test case, only Guid_Spds_Dpkg.Vc3curspds.Mach.Data  leaa than the lower limits, the other are satisfied
 7646   7655     REQUIREMENTS UNDER EVALUATION : PERF_SDD_07506(PERF_SRD_6192),
 7647   7656                                     PERF_SDD_07543_INT,PERF_SDD_07501_INT
 7648   7657     SUPPORTING REQUIREMENTS : N/A
 7649   7658
 7650   7659
 7651   7660 INPUT                                                                                                          VALUE
 7652   7661 -----------------------------------------------------------------------------------------  ------------------
             » --------
 7653   7662 Perf_Dpkg.Min_Gwt
             »    100.0
 7654   7663 Perf_Dpkg.Max_Gwt
```

```
                »    400.0
 7655   7664 Perf_Background_Dpkg.Flight_Plan_Type                                                          Perf_Int_Base_Tpkg.I
                » s_Active
 7656   7665 Perf_Background_Dpkg.Pcitin.Itinerary                                                                    Pred_To_A
                » lt_Preds
 7657   7666 Perf_Background_Dpkg.Pcactorsec                                                                                  S
                » econdary
 7658   7667 Perf_Dpkg.Pcfirstpred(Secondary)
                »    false
 7659   7668 Perf_Background_Dpkg.Psenginesoff
                »    False
 7660   7669 Perf_Background_Dpkg.Pcgwind
                »    Valid
 7661   7670 Perf_Dpkg.Gross_Weight.Status
                »    Valid
 7662   7671 Perf_Background_Dpkg.Pcspeedmode                                                                     Perf_Ext_Tp
                » kg.Vmspd
 7663   7672 Guid_Ext_Dpkg.Va3vertmde                                                                             Perf_Ext_Tp
                » kg.Vmspd
 7664   7673 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase                                                            P
                » reflight
 7665   7674 Perf_Background_Dpkg.Pstogwtval
                »     true
 7666   7675 Perf_Background_Dpkg.Psairborne
                »    false
 7667   7676 Guid_Spds_Dpkg.Vc3curspds.Cas.Valid
                »     true
 7668   7677 Guid_Spds_Dpkg.Vc3curspds.Cas.Data
                »    10.01
 7669   7678 Guid_Spds_Dpkg.Vc3curspds.Mach.Valid
                »     true
 7670   7679 Guid_Spds_Dpkg.Vc3curspds.Mach.Data
                »    0.009
 7671   7680 Perf_Background_Dpkg.Pcvertmode                                                               Perf_Int_Base_Tpkg
                » .Openclb
 7672   7681 Perf_Dpkg.Takeoff_Gwt.Valid
                »     true
 7673   7682 Perf_Dpkg.Takeoff_Gwt.Data
                »     90.0
 7674   7683 Perf_Background_Dpkg.Psgw
                »      0.0
 7675   7684 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
                »    false
 7676   7685 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude
```

```
»     True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach
»     true
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas
»     True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas
»     True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude
»    -2001
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
»     true
CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt
»  25001.0
Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt
»  25001.1


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Psgw                                                      90.0          0.001                 9.0
» 0000E+01  P
Curcas                                                                          0.0          0.001                 0.0
» 0000E+00  P
Curmach                                                                         0.0          0.001                 0.0
» 0000E+00  P
Xoveralt                                                                    25000.0          0.001                 2.5
» 0000E+04  P
Perf_Background_Dpkg.Pcvertmode                         /= Perf_Int_Base_Tpkg.Econo          (N/A)
»  OPENCLB  P
Perf_Background_Dpkg.Psgw                                                     100.0          0.001                 1.0
» 0000E+02  P


====> All 6 Comparisons Passed <====


TESTID: 60
    If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
» s are on,
    the aircraft gross weight shall be set to any one of the following:
   - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
» craft
```

```
     gross weight and Take Off gross weight being valid
   - Aircraft GW from the Performance Weights function,  if the flight phase is other
     than takeoff or before, or the aircraft gross weight or the Take Off gross weight
     being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT
    --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is active,engines ar
» e off,
    --the flight phase is Preflight,Take Off gross weight is valid, but the aircraft gross weightis invalid ,then Airc
» raft GW
    --from the Performance Weights function.
    Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
    are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
» d to FL250.
    PERF_SDD_07543_INT
    --In this test case, only Guid_Spds_Dpkg.Vc3Curspds.Mach.Valid is False
    --as Flifht phase is Take off also test the negative case of PERF_SDD_07540 and PERF_SDD_08227_INT
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07501_INT
    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                           VALUE
--------------------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Dpkg.Min_Gwt
»    100.0
Perf_Dpkg.Max_Gwt
»    400.0
Perf_Background_Dpkg.Flight_Plan_Type                                                                           Perf_Int_Base_Tpkg.I
» s_Active
Perf_Background_Dpkg.Pcitin.Itinerary                                                                                      Pred_To_A
» lt_Preds
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Dpkg.Pcfirstpred(Active)
»    false
Perf_Background_Dpkg.Psenginesoff
»     True
Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
»     true
Perf_Background_Dpkg.Pcspeedmode                                                                                          Perf_Ext_Tp
» kg.Vmspd
Guid_Ext_Dpkg.Va3vertmde                                                                                                  Perf_Ext_Tp
» kg.Vmspd
```

```
7733   7742 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase                                                                     P
            » reflight
7734   7743 Perf_Background_Dpkg.Pcgwind
            »  Invalid
7735   7744 Perf_Background_Dpkg.Pstogwtval
            »     true
7736   7745 Perf_Background_Dpkg.Psairborne
            »    false
7737   7746 Guid_Spds_Dpkg.Vc3curspds.Cas.Valid
            »     true
7738   7747 Guid_Spds_Dpkg.Vc3curspds.Cas.Data
            »    10.01
7739   7748 Guid_Spds_Dpkg.Vc3curspds.Mach.Valid
            »    false
7740   7749 Guid_Spds_Dpkg.Vc3curspds.Mach.Data
            »    0.011
7741   7750 Perf_Background_Dpkg.Pcvertmode                                                                       Perf_Int_Base_Tpkg
            » .Openclb
7742   7751 Perf_Dpkg.Gross_Weight.Status
            »  Invalid
7743   7752 Perf_Dpkg.Takeoff_Gwt.Valid
            »     True
7744   7753 Perf_Dpkg.Takeoff_Gwt.Data
            »     90.0
7745   7754 Perf_Dpkg.Gross_Weight.Data
            »    150.0
7746   7755 Perf_Background_Dpkg.Psgw
            »      0.0
7747   7756 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_40_blk0_rec.FRAME_40_Disc_Word_4.Mach_Selection_Mode_Selected
            »    false
7748   7757 CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt
            »  25001.0
7749   7758 Perf_Dpkg.Pgmanspdtgt.Speed.Xoveralt
            »  25001.1
7750   7759
7751   7760
7752   7761 OUTPUT                                                           EXPECTED                TOLERANCE              ACTUAL
            »           P/F
7753   7762 -----------------------------------------------------  ------------------------------  -------------- ------------------
            » --------  ----
7754   7763 Curcas                                                                            0.0           0.001                0.0
            » 0000E+00  P
7755   7764 Curmach                                                                           0.0           0.001                0.0
            » 0000E+00  P
```

```
Xoveralt                                                                     25000.0        0.001                2.5
» 0000E+04  P
Perf_Background_Dpkg.Psgw                                                      150.0        0.001                1.5
» 0000E+02  P


====> All 4 Comparisons Passed <====


TESTID: 61
    If the current itinerary is not Fuel_Plan_Fpln_Preds and either the working flight plan is not Secondary or engine
» s are on,
    the aircraft gross weight shall be set to any one of the following:
   - Aircraft Takeoff GW from the Performance Weights function, if the flight phase is takeoff or before, with the air
» craft
     gross weight and Take Off gross weight being valid
   - Aircraft GW from the Performance Weights function,  if the flight phase is other
     than takeoff or before, or the aircraft gross weight or the Take Off gross weight
     being invalid
    The above computed aircraft gross weight is limited between Min_Gwt and Max_Gwt.
    PERF_SDD_07501_INT
    --In this test case,the current itinerary is not Fuel_Plan_Fpln_Preds,the working flight plan is active,engines ar
» e off,
    --the flight phase is Preflight,the aircraft gross weightis is valid, but the Take Off gross weight invalid ,then
» Aircraft GW
    --from the Performance Weights function.
    Crossover altitude shall be computed by calling Prf_External_Util_Pkg.Puxoveralt if VG speed targets are valid and
    are greater than lower limits. Otherwise, the aircraft speeds from ADC are used and crossover altitude is defaulte
» d to FL250.
    PERF_SDD_07543_INT
    --in this test case, only Guid_Spds_Dpkg.Vc3Curspds.Cas.Valid is false, the other are satisfied
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_07501_INT,PERF_SDD_07543_INT
    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                           VALUE
-------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Dpkg.Min_Gwt
»    100.0
Perf_Dpkg.Max_Gwt
»    400.0
Perf_Background_Dpkg.Flight_Plan_Type                                                               Perf_Int_Base_Tpkg.I
» s_Active
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 7789  7798 Perf_Background_Dpkg.Pcitin.Itinerary                                                          Prim_Fp
            » ln_Preds
 7790  7799 ATC_DISCRETES_PKG:body.Adson_Flag
            »     True
 7791  7800 Perf_Ads_Dpkg.Fi_Enabled
            »     True
 7792  7801 Guid_Ext_Dpkg.Gcxxlatautoc
            »    False
 7793  7802 Perf_Background_Dpkg.Ats_Enable
            »     True
 7794  7803 Perf_Background_Dpkg.Pcactorsec
            »   Active
 7795  7804 Perf_Dpkg.Pcfirstpred(Active)
            »    false
 7796  7805 Perf_Background_Dpkg.Psenginesoff
            »     True
 7797  7806 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off
            »     true
 7798  7807 Perf_Background_Dpkg.Pcspeedmode                                                        Perf_Ext_Tp
            » kg.Vmspd
 7799  7808 Guid_Ext_Dpkg.Va3vertmde                                                               Perf_Ext_Tp
            » kg.Vmspd
 7800  7809 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase                                                P
            » reflight
 7801  7810 Perf_Background_Dpkg.Pcgwind
            »    valid
 7802  7811 Perf_Background_Dpkg.Pstogwtval
            »    false
 7803  7812 Perf_Background_Dpkg.Psairborne
            »    false
 7804  7813 Guid_Spds_Dpkg.Vc3curspds.Cas.Valid
            »    false
 7805  7814 Guid_Spds_Dpkg.Vc3curspds.Cas.Data
            »    10.01
 7806  7815 Guid_Spds_Dpkg.Vc3curspds.Mach.Valid
            »     true
 7807  7816 Guid_Spds_Dpkg.Vc3curspds.Mach.Data
            »    0.011
 7808  7817 Perf_Background_Dpkg.Pcvertmode                                                  Perf_Int_Base_Tpkg
            » .Openclb
 7809  7818 Perf_Dpkg.Gross_Weight.Status
            »    valid
 7810  7819 Perf_Dpkg.Takeoff_Gwt.Valid
            »    false
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
7811  7820 Perf_Dpkg.Takeoff_Gwt.Data
           »     90.0
7812  7821 Perf_Dpkg.Gross_Weight.Data
           »    150.0
7813  7822 Perf_Background_Dpkg.Psgw
           »      0.0
7814  7823 
7815  7824 
7816  7825 OUTPUT                                                           EXPECTED               TOLERANCE               ACTUAL
           »           P/F
7817  7826 ----------------------------------------------------  -----------------------------  -------------  -----------------
           » --------  ----
7818  7827 Curcas                                                                      0.0            0.001                  0.0
           » 0000E+00  P
7819  7828 Curmach                                                                     0.0            0.001                  0.0
           » 0000E+00  P
7820  7829 Xoveralt                                                                25000.0            0.001                  2.5
           » 0000E+04  P
7821  7830 Perf_Background_Dpkg.Psgw                                                 150.0            0.001                  1.5
           » 0000E+02  P
7822  7831 
7823  7832 
7824  7833 ====> All 4 Comparisons Passed <====
7825  7834 
7826  7835 
7827  7836 TESTID: 62
7828  7837     If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
7829  7838     is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
7830  7839     QNH or QFE shall be set to True. Otherwise it is set to False
7831  7840     PERF_SDD_08588_INT
7832  7841 
7833  7842     If the working flight plan is Active or Temporary, then the Secondary flight plan Predictions flag and
7834  7843     the What-If predictions enabled flag shall be set to false.
7835  7844     PERF_SDD_08665(PERF_SRD_23775)
7836  7845 
7837  7846     In this case:
7838  7847     the working flight plan is Active
7839  7848     the current barometric reference is not QNH and QFE
7840  7849     the current barometric reference data retrieved from IO is invalid
7841  7850     so
7842  7851     the Secondary flight plan Predictions flag should be set false
7843  7852     the What-If predictions enabled flag should be set to false
7844  7853     the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
           » t to false
```

```


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                             Perf_Int_Base_Tpkg.I
» s_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL
»    false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data
»    false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL
»    false
Perf_Background_Dpkg.QNH_QFE_Selected
»     True
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec)
»     True
Perf_Background_Dpkg.Secn_Fpln_Itin
»     True


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.QNH_QFE_Selected                                         false          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Secn_Fpln_Itin                                           false          (N/A)
»    FALSE  P
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec)   false          (N/A)
»    FALSE  P


====> All 3 Comparisons Passed <====


TESTID: 63
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

```

```
 7875   7884     If the working flight plan is Active or Temporary, then the Secondary flight plan Predictions flag
 7876   7885     and the What-If predictions enabled flag shall be set to false.
 7877   7886     PERF_SDD_08665(PERF_SRD_23775)
 7878   7887
 7879   7888     If the working flight plan is a Secondaryn Flight plan, then the What-If Pseudo button push type shall be set base
              » d on the
 7880   7889     current flight plan type.
 7881   7890     For Secondary flight plan, the pseudo button push type is Pb_Sec_What_If_Cancelled.
 7882   7891     For Secondary2 flight plan, the pseudo button push type is Pb_Sec2_What_If_Cancelled.
 7883   7892     For Secondary3 flight plan, the pseudo button push type is Pb_Sec3_What_If_Cancelled.
 7884   7893     PERF_SDD_08667(PERF_SRD_23774)
 7885   7894
 7886   7895     In this case:
 7887   7896     the working flight plan is Temporary
 7888   7897     the current barometric reference is not QNH and QFE
 7889   7898     the current barometric reference data retrieved from IO is valid
 7890   7899     so
 7891   7900     the Secondary flight plan Predictions flag should be set false
 7892   7901     the What-If predictions enabled flag should be set to false
 7893   7902     the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
              » t to false
 7894   7903     the pseudo button push type is default.
 7895   7904
 7896   7905
 7897   7906 INPUT                                                                                                    VALUE
 7898   7907 ----------------------------------------------------------------------------------------------  ------------------
              » --------
 7899   7908 Perf_Background_Dpkg.Flight_Plan_Type                                                          Perf_Int_Base_Tpkg.I
              » s_Active
 7900   7909 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL
              »    false
 7901   7910 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data
              »     True
 7902   7911 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL
              »    false
 7903   7912 Perf_Background_Dpkg.QNH_QFE_Selected
              »     True
 7904   7913 Perf_Background_Dpkg.Pcactorsec                                                                                  T
              » emporary
 7905   7914 Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec)
              »     True
 7906   7915 Perf_Background_Dpkg.Secn_Fpln_Itin
              »     True
 7907   7916 Perf_Background_Dpkg.What_If_Data.Pseudo_Button
```

```
»        0


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.QNH_QFE_Selected                                         false          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Secn_Fpln_Itin                                           false          (N/A)
»    FALSE  P
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec)   false          (N/A)
»    FALSE  P
Perf_Background_Dpkg.What_If_Data.Pseudo_Button                                   0          (N/A)
»        0  P


====> All 4 Comparisons Passed <====


TESTID: 64
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the working flight plan is Active or Temporary, then the Secondary flight plan Predictions flag and
    the What-If predictions enabled flag shall be set to false.
    PERF_SDD_08665(PERF_SRD_23775)

    If the current flight plan is a Copy Active Secondaryn FPLN, then the following shall be Done:
    - The Secondary flight plan predictions flag is set to True, if the current itinerary is primary flight plan predi
» ctions.
    - The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Ma
» ximum_Alt.
    - The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_
» Maximum_Alt
    PERF_SDD_08666(PERF_SRD_23775)

    In this case:
    the current flight plan type is a Copy Active
    the working flight plan is Secondary
    the current itinerary is primary flight plan predictions
    the current barometric reference is QNH
```

```
 7942   7951     the current barometric reference data retrieved from IO is invalid
 7943   7952     so
 7944   7953     the Secondary flight plan Predictions flag should be set True
 7945   7954     the What-If predictions enabled flag should be default
 7946   7955     the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
             » t to false
 7947   7956     The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Maxi
             » mum_Alt.
 7948   7957     The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_Ma
             » ximum_Alt
 7949   7958 
 7950   7959 
 7951   7960 INPUT                                                                                                           VALUE
 7952   7961 -----------------------------------------------------------------------------------------------  ------------------
             » --------
 7953   7962 Perf_Background_Dpkg.Flight_Plan_Type                                                         Perf_Int_Base_Tpkg.Copy_Fro
             » m_Active
 7954   7963 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL
             »     True
 7955   7964 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data
             »    false
 7956   7965 Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL
             »    false
 7957   7966 Perf_Background_Dpkg.QNH_QFE_Selected
             »     True
 7958   7967 Perf_Background_Dpkg.Pcactorsec                                                                                    S
             » econdary
 7959   7968 Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec)
             »     True
 7960   7969 Perf_Background_Dpkg.Secn_Fpln_Itin
             »     True
 7961   7970 Perf_Background_Dpkg.Pcitin.Itinerary                                                                          Prim_Fp
             » ln_Preds
 7962   7971 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
             »     True
 7963   7972 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
             »     True
 7964   7973 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
             »    32.20
 7965   7974 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
             »    32.30
 7966   7975 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid
             »    false
 7967   7976 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid
```

```
»    false
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data
»     0.00
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data
»     0.00


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.QNH_QFE_Selected                                         false          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Secn_Fpln_Itin                                            True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec)    True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid                     True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid                    True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data                     32.20          0.001                 3.2
» 2000E+01  P
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data                    32.30          0.001                 3.2
» 3000E+01  P


====> All 7 Comparisons Passed <====


TESTID: 65
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the current flight plan is a Copy Active Secondaryn FPLN, then the following shall be Done:
    - The Secondary flight plan predictions flag is set to True, if the current itinerary is primary flight plan predi
» ctions.
    - The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Ma
» ximum_Alt.
    - The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_
» Maximum_Alt
    PERF_SDD_08666(PERF_SRD_23775)

    If the working flight plan is a Secondaryn Flight plan, then the What-If Pseudo button push type shall be set base
» d on
    the current flight plan type.
    For Secondary flight plan, the pseudo button push type is Pb_Sec_What_If_Cancelled.
    For Secondary2 flight plan, the pseudo button push type is Pb_Sec2_What_If_Cancelled.
    For Secondary3 flight plan, the pseudo button push type is Pb_Sec3_What_If_Cancelled.
    PERF_SDD_08667(PERF_SRD_23774)

    in this case:
    the current flight plan type is a Copy Active
    the working flight plan is Secondary
    the current itinerary is CURRENT VERTICAL MODE PREDS DURING 1ST 2 PASSES OF PREDS
    the current barometric reference is QNH
    the current barometric reference data retrieved from IO is valid
    so
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to True
    the Secondary flight plan Predictions flag should be set false
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to false
    The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Maxi
» mum_Alt
    The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_Ma
» ximum_Alt
    the pseudo button push type is Pb_Sec_What_If_Cancelled


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                      Perf_Int_Base_Tpkg.Copy_Fro
» m_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL
»     True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data
»     True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL
»    false
Perf_Background_Dpkg.QNH_QFE_Selected
»    false
Perf_Background_Dpkg.Pcactorsec                                                                                      S
» econdary
Perf_Background_Dpkg.What_If_Preds_Enabled(Perf_Background_Dpkg.Pcactorsec)
```

```
                 »     True
  8029   8038 Perf_Background_Dpkg.Secn_Fpln_Itin
                 »     True
  8030   8039 Perf_Background_Dpkg.Pcitin.Itinerary                                                                       Current_Mo
                 » de_Preds
  8031   8040 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
                 »     True
  8032   8041 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
                 »     True
  8033   8042 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
                 »    32.20
  8034   8043 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
                 »    32.30
  8035   8044 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid
                 »    false
  8036   8045 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid
                 »    false
  8037   8046 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data
                 »     0.00
  8038   8047 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data
                 »     0.00
  8039   8048 Perf_Background_Dpkg.What_If_Data.Pseudo_Button
                 »        0
  8040   8049
  8041   8050
  8042   8051 OUTPUT                                                         EXPECTED                 TOLERANCE              ACTUAL
                 »           P/F
  8043   8052 ----------------------------------------------------  -----------------------------  -------------  ------------------
                 » --------  ----
  8044   8053 Perf_Background_Dpkg.QNH_QFE_Selected                                      True          (N/A)
                 »     TRUE  P
  8045   8054 Perf_Background_Dpkg.Secn_Fpln_Itin                                       false          (N/A)
                 »    FALSE  P
  8046   8055 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid                True          (N/A)
                 »     TRUE  P
  8047   8056 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid               True          (N/A)
                 »     TRUE  P
  8048   8057 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data                32.20          0.001                   3.2
                 » 2000E+01  P
  8049   8058 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data               32.30          0.001                   3.2
                 » 3000E+01  P
  8050   8059 Perf_Background_Dpkg.What_If_Data.Pseudo_Button                             52          (N/A)
                 »       52  P
  8051   8060
```

```

====> All 7 Comparisons Passed <====


TESTID: 66
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the working flight plan is a Secondaryn Flight plan, then the What-If Pseudo button push type shall be set base
» d
    on the current flight plan type.
    For Secondary flight plan, the pseudo button push type is Pb_Sec_What_If_Cancelled.
    For Secondary2 flight plan, the pseudo button push type is Pb_Sec2_What_If_Cancelled.
    For Secondary3 flight plan, the pseudo button push type is Pb_Sec3_What_If_Cancelled.
    PERF_SDD_08667(PERF_SRD_23774)

    in this case:
    the working flight plan is Secondary2
    the current barometric reference is QFE
    the current barometric reference data retrieved from IO is invalid
    so
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to false
    the pseudo button push type is Pb_Sec2_What_If_Cancelled


INPUT                                                                                                        VALUE
---------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                Perf_Int_Base_Tpkg.I
» s_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL
»    false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data
»    false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL
»     True
Perf_Background_Dpkg.QNH_QFE_Selected
»     True
Perf_Background_Dpkg.Pcactorsec                                                                                    Se
» condary2
Perf_Background_Dpkg.What_If_Data.Pseudo_Button
```

```
»        0


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.QNH_QFE_Selected                                         false          (N/A)
»    FALSE  P
Perf_Background_Dpkg.What_If_Data.Pseudo_Button                                  54          (N/A)
»       54  P


====> All 2 Comparisons Passed <====


TESTID: 67
    If the current barometric reference is QNH or QFE and the current barometric reference data retrieved from IO
    is valid then the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either
    QNH or QFE shall be set to True. Otherwise it is set to False
    PERF_SDD_08588_INT

    If the working flight plan is a Secondaryn Flight plan, then the What-If Pseudo button push type shall be set base
» d
    on the current flight plan type.
    For Secondary flight plan, the pseudo button push type is Pb_Sec_What_If_Cancelled.
    For Secondary2 flight plan, the pseudo button push type is Pb_Sec2_What_If_Cancelled.
    For Secondary3 flight plan, the pseudo button push type is Pb_Sec3_What_If_Cancelled.
    PERF_SDD_08667(PERF_SRD_23774)

    in this case:
    the working flight plan is Secondary3
    the current barometric reference is QFE
    the current barometric reference data retrieved from IO is valid
    so
    the variable (QNH_QFE_Selected) to indicate that the current barometric reference is either QNH or QFE shall be se
» t to True
    the pseudo button push type is Pb_Sec3_What_If_Cancelled


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                             Perf_Int_Base_Tpkg.I
```

```
» s_Active
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QNH_SETTING_CAPT_SEL
»    false
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.FCU_Data
»     True
Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.FCU_Data.QFE_SETTING_CAPT_SEL
»     True
Perf_Background_Dpkg.QNH_QFE_Selected
»    false
Perf_Background_Dpkg.Pcactorsec                                                                                     Se
» condary3
Perf_Background_Dpkg.What_If_Data.Pseudo_Button
»        0


OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.QNH_QFE_Selected                                          True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.What_If_Data.Pseudo_Button                                  55          (N/A)
»       55  P


====> All 2 Comparisons Passed <====


TESTID: 68

    For an independent from-to pair Secondaryn flight plan, the starting predictions data shall be set up
    as if the aircraft were sitting on the ground in pre-flight at the origin airport of the Secondaryn flight plan,
    rather than from the current aircraft state.  Thus, following data are set:
    - The airborne flag (Psairborne) is set false.
    - Auto lateral mode (Psautolat) is set to true.
    - Engine out flag (Psengout) is set to false.
    - The current flightphase (Pcfltphase) is set to pre-flight.
    - Speed mode (Pcspeedmode) is set to Vmecon.
    - Despath reference (Pcpathref) is set to Nopath.
    - Current GMT time (Pcgmttime) (Hours, Minutes & Seconds) is set to zero.
    - Inertial vertical speed (Psinertvs) is set to zero.
    - Current aircraft speeds (Pscurtas, Pscurmach & Pscurcas) are set to zero.
    - Validity of Aircraft True air speed (Pscurtasvalid) set to False
    - Aircraft configuration (Pcacconfig) is set to clean.
    - Airbrakes (Pcairbrakes) are set to zero airbrakes.
    - Constraint management (Pccuraltcstr) validity is set to false.
    - Previous captured barometric altitude (Pcprebcalt) validity is set to false.
    - All the flags in the perf hold flag record (Pcholdflags) are set to false.
    - All the flags in the descent limit latch record (Pcdeslimlat) are set to false.
    - Flag indicating VG has latched VAPP as target (Psappspdlat) is set to false.
    - Flag indicating aircraft is within 3 NM prior to the entry of the HM(Psconsider_Hm) is      set to false.
    - Flag indicating aircraft is in HA/HF decel zone (Pshxpxdecel) is set to false.
    - Flag indicating aircraft is in HM decel zone (Pshmdecel) is set to false.
    - Flag indicating to Ignore HM (Psignorehm) is set to true.
    - Background step climb & step descent active flags (Psstpclbact & Psstpdesact) are set     to false.
    - Engines off status (Psenginesoff) is set to true (off).
    - Aircraft engine or wing anti ice (Ac_Anti_Ice) is set to false (Off).
    - Aircraft bleeds status (Ac_Bleeds); Engine Cowl Anti-Ice bleed, Wing Anti-Ice Bleed and
      Air Conditioning Bleed are set to false (off).
    - Cruise altitude (Pscrzalt) data is set by calling procedure
      Fpln_Ext_Dpkg.Get_Cruise_Alt.
    - Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
      Data and Valid values respectively.
    - Valid cruise altitude flag (Valcrzalt) is set from the retrieved cruise altitude data.
    - ADC/FG input data (Adc_Fg_Valid) validity is set to true.
    - Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to true.
    - The Secondary flight plan predictions flag is set to True, if the current itinerary is primary flight plan predi
» ctions.
    - The What-If Engine Out LRC Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_LRC_Ma
» ximum_Alt.
    - The What-If Engine Out Gdot Maximum Altitude is retrieved by calling the procedure Perf_To_Cdck_Dpkg.WI_EO_GDOT_
» Maximum_Alt.

    These initializations make predictions independent of the Active Primary flightplan and current aircraft character
» istics
    PERF_SDD_4796(PERF_SRD_1592, PERF_SRD_23775, PERF_SRD_6005_INT)

     the working flight plan is not Is_Active and Copy_From_Active,
       a variety of following global data shall be not retrieved which are common to the Active flight plan prediction
» s process.
       - A/C is below a NAVDB imposed TDP segment (Below_Navdb_Imposed_Segment) from
       guidance
       - Guidance provided TDP capture tolerance
      - when the Engine out status and the VG indicator that Green-Dot Speed is latched,
        The flag indicating that VG is using latched Green-Dot descent speed is set.

      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
                   PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
8195  8204                   PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
8196  8205
8197  8206    in this case,
8198  8207    flight plan is Secondary
8199  8208    the current itinerary is not primary flight plan predictions
8200  8209
8201  8210
8202  8211 INPUT                                                                                           VALUE
8203  8212 ----------------------------------------------------------------------------------------------  -----------------
           » --------
8204  8213 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Ky_Data_Exec
           »    False
8205  8214 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec
           »    False
8206  8215 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Pb_Data_Exec
           »    False
8207  8216 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Gb_Data_Exec
           »    False
8208  8217 CTP_A350_PERF_BKGND_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec
           »    False
8209  8218 Perf_Dpkg.Min_Gwt
           »    100.0
8210  8219 Perf_Dpkg.Max_Gwt
           »    400.0
8211  8220 Prf_Bkgnd_Pkg:BODY.Valcrzalt
           »    False
8212  8221 Perf_Background_Dpkg.Pcactorsec                                                                    S
           » econdary
8213  8222 Perf_Background_Dpkg.Flight_Plan_Type
           » No_Preds
8214  8223 Perf_Background_Dpkg.Pcitin.Flight_Plan                                                           S
           » econdary
8215  8224 Perf_Background_Dpkg.Psignorehm
           »    False
8216  8225 Perf_Background_Dpkg.Pcfltphase
           »   Cruise
8217  8226 Perf_Background_Dpkg.Ats_Enable
           »     True
8218  8227 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »   Cruise
8219  8228 Perf_Background_Dpkg.Psacalt
           »  10000.0
8220  8229 Perf_Database_Dpkg.Psmmo
           »     0.45
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
8221  8230 Perf_Background_Dpkg.Pszfw
           »    300.0
8222  8231 Perf_Background_Dpkg.Psblockfuel
           »     50.0
8223  8232 Perf_Background_Dpkg.Pstaxifuel
           »     25.0
8224  8233 Perf_Background_Dpkg.Psairborne
           »     True
8225  8234 Perf_Background_Dpkg.Psautolat
           »    False
8226  8235 Guid_Ext_Dpkg.Gcxxlatautoc
           »    False
8227  8236 Perf_background_dpkg.Constant_mach_seg.IS_ACTIVE
           »    False
8228  8237 Perf_Background_Dpkg.Psengout
           »     True
8229  8238 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »    False
8230  8239 Perf_Background_Dpkg.Pcholdflags.Hmdecel
           »     True
8231  8240 Perf_Dpkg.Repredict_Hm_Decel
           »     True
8232  8241 Perf_Background_DPkg.Pshmdecel
           »     True
8233  8242 Perf_Background_Dpkg.Pcholdflags.Hmactive
           »     True
8234  8243 Perf_Ads_Dpkg.Fi_Enabled
           »    False
8235  8244 Guid_Checkpoint_Resynch_Dpkg.Va3Holdflags.Hmactive
           »    False
8236  8245 Perf_Background_Dpkg.Pcholdflags.Manhmwarn
           »     True
8237  8246 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel
           »     True
8238  8247 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv
           »     True
8239  8248 Perf_Background_Dpkg.Pcholdflags.Hmdistval
           »     True
8240  8249 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim
           »     True
8241  8250 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim
           »     True
8242  8251 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel
           »     True
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
8243 8252 Perf_Background_Dpkg.Psappspdlat
          »     True
8244 8253 Perf_Dpkg.Pcengoutprds
          »   Altpln
8245 8254 Perf_Background_Dpkg.Pcpathref
          »   Onpath
8246 8255 Guid_Ext_Dpkg.Va3Vertmde                                                                                  Perf_Ext_Tpk
          » g.Vmnone
8247 8256 Perf_Background_DPkg.Pscurcas
          »      5.0
8248 8257 Perf_Background_DPkg.Pscurmach
          »      5.0
8249 8258 Perf_Background_DPkg.Pscurtas
          »      5.0
8250 8259 Perf_Background_Dpkg.Psenginesoff
          »    False
8251 8260 Perf_Despath_Dpkg.Pcdespath.Vgavalid
          »    False
8252 8261 Perf_Background_Dpkg.Pstogwtval
          »    False
8253 8262 Perf_Background_Dpkg.Pstogwt
          »     50.0
8254 8263 Perf_Background_Dpkg.Pcgwind
          »  Invalid
8255 8264 Perf_Background_Dpkg.Psgw
          »      0.0
8256 8265 Perf_Dpkg.Gross_Weight.Status
          »    Valid
8257 8266 Perf_Dpkg.Gross_Weight.Data
          »    150.0
8258 8267 Perf_Integration_DPkg.Pcairbrakes
          »   Fullab
8259 8268 Perf_Background_Dpkg.Pcacconfig
          »        5
8260 8269 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Included
          »     True
8261 8270 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Alt
          »   9000.0
8262 8271 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
          »    200.0
8263 8272 Perf_Background_Dpkg.Pcperflegs(Clb_Spdlim).Spd
          »    400.0
8264 8273 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
          »    False
```

```
 8265   8274 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 8266   8275 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 8267   8276 Perf_Background_Dpkg.Psstpclbact
             »     True
 8268   8277 Perf_Background_Dpkg.Psstpdesact
             »     True
 8269   8278 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
 8270   8279 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »      0.0
 8271   8280 Guid_Spds_Dpkg.Vc3Curspds.Mach.Data
             »     0.65
 8272   8281 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
 8273   8282 Perf_Background_Dpkg.Pccuraltcstr.Valid
             »     True
 8274   8283 Perf_Background_Dpkg.Pcprebcalt.Valid
             »     True
 8275   8284 Perf_Background_Dpkg.Pcgmttime.Hour
             »        1
 8276   8285 Perf_Background_Dpkg.Pcgmttime.Minute
             »        1
 8277   8286 Perf_Background_Dpkg.Pcgmttime.Second
             »        1
 8278   8287 Perf_Background_Dpkg.Psinertvs
             »      5.0
 8279   8288 Perf_ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Requested_Waypoints
             »        0
 8280   8289 Perf_Ads_Dpkg.Pr_Buffer.Io_Data.Num_Of_Predicted_Waypoints
             »        2
 8281   8290 Perf_ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Requested_Points
             »        0
 8282   8291 Perf_Ads_Dpkg.Ii_Buffer.Io_Data.Num_Of_Predicted_Points
             »        2
 8283   8292 Perf_Ads_Dpkg.Pr_Enabled
             »    False
 8284   8293 ATC_DISCRETES_PKG:body.Adson_Flag
             »    False
 8285   8294 Perf_Integration_Dpkg.Psoldnoentgt
             »      0.0
 8286   8295 Perf_Background_Dpkg.Pcoldcasmchi                                                               Fmcs_Base_Ty
             » pes.Mach
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 8287   8296 Perf_Background_Dpkg.Pcspeedmode                                                               Perf_Ext_Tp
             » kg.Vmspd
 8288   8297 Perf_Background_Dpkg.Adc_Fg_Valid
             »    False
 8289   8298 Prf_Bkgnd_Pkg:body.Fgspdsvalid
             »    False
 8290   8299 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt_Status      Takeoff_Alt_Type
             » s.Active
 8291   8300 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_Speed_Val
             »    False
 8292   8301 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Secondary).Noise_End_Alt
             »    300.0
 8293   8302 Perf_Background_Dpkg.Noise_Data.Altitude.Data
             »      0.0
 8294   8303 Perf_Background_Dpkg.Noise_Data.Altitude.Valid
             »    False
 8295   8304 Perf_Background_Dpkg.Noise_Data.Speed.Valid
             »     True
 8296   8305 Perf_Background_Dpkg.Pcitin.Itinerary                                                              Prim_Fp
             » ln_Preds
 8297   8306 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
             »    False
 8298   8307 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
             »    False
 8299   8308 Perf_Background_Dpkg.Ac_Crosstrack_Error
             »      2.5
 8300   8309 Perf_Background_Dpkg.Pscurtasvalid
             »     True
 8301   8310 Perf_Background_Dpkg.Psconsider_Hm
             »     True
 8302   8311 Perf_Background_Dpkg.Pshxpxdecel
             »     True
 8303   8312 Perf_Background_Dpkg.Ac_Anti_Ice
             »     True
 8304   8313 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai
             »     True
 8305   8314 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai
             »     True
 8306   8315 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond
             »     True
 8307   8316 Perf_Background_Dpkg.Pcholdflags.Consider_Hm
             »     True
 8308   8317
 8309   8318
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
8310  8319  define Get_Cruise_Alt_Called := False
8311  8320
8312  8321
8313  8322 INPUT                                                                                                       VALUE
8314  8323 -------------------------------------------------------------------------------------------------  ------------------
           » --------
8315  8324 Perf_Dpkg.takeoff_gwt.valid
           »     True
8316  8325 Perf_Dpkg.takeoff_gwt.data
           »    400.0
8317  8326 Perf_Background_Dpkg.Psgetout
           »     True
8318  8327 Perf_Background_Dpkg.Ref_Flight_Plan
           »        1
8319  8328 Perf_Ext_Despath:Body.data_storage(Active).Pgvdespath.Vgavalid
           »     True
8320  8329 Perf_Despath_Dpkg.Pcdespath.Vgavalid
           »     true
8321  8330 Perf_Background_Dpkg.Pcitin.Itinerary                                                                 Current_Mo
           » de_Preds
8322  8331 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
           »     True
8323  8332 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
           »     True
8324  8333 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
           »    32.20
8325  8334 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
           »    32.30
8326  8335 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid
           »    false
8327  8336 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid
           »    false
8328  8337 Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data
           »     0.00
8329  8338 Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data
           »     0.00
8330  8339 Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd
           »     True
8331  8340 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment
           »    False
8332  8341 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol
           »   100.00
8333  8342 Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance
           »   188.00
```

```
 8334   8343 Perf_Background_Dpkg.Psgrndotdes
             »     true
 8335   8344 Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes
             »     true
 8336   8345 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.valid
             »    False
 8337   8346 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data
             »      0.0
 8338   8347 
 8339   8348 
 8340   8349  define Get_Cruise_Alt_Called   := True
 8341   8350  define Get_Cruise_Alt_Called   := True
 8342   8351 
 8343   8352 
 8344   8353 OUTPUT                                                          EXPECTED                TOLERANCE             ACTUAL
             »           P/F
 8345   8354 ----------------------------------------------------  -----------------------------  -------------  -----------------
             » --------  ----
 8346   8355 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment              False          (N/A)
             »    FALSE  P
 8347   8356 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol                     100.00          0.001                  1.0
             » 0000E+02  P
 8348   8357 Perf_Background_Dpkg.Psgrndotdes                                              true          (N/A)
             »     TRUE  P
 8349   8358 Perf_Integration_Dpkg.Psoldnoentgt                                             0.0          0.001                  0.0
             » 0000E+00  P
 8350   8359 Perf_Background_Dpkg.Pcoldcasmchi                                Fmcs_Base_Types.Mach          (N/A)
             »     MACH  P
 8351   8360 Perf_Despath_Dpkg.Pcdespath.Vgavalid                                        /= False          (N/A)
             »     TRUE  P
 8352   8361 Perf_Background_Dpkg.Psairborne                                               False          (N/A)
             »    FALSE  P
 8353   8362 Perf_Background_Dpkg.Psautolat                                                 True          (N/A)
             »     TRUE  P
 8354   8363 Perf_Background_Dpkg.Psengout                                                 False          (N/A)
             »    FALSE  P
 8355   8364 Perf_Background_Dpkg.Psgetout                                                  TRUE          (N/A)
             »     TRUE  P
 8356   8365 Perf_Background_Dpkg.Pcfltphase                                           Preflight          (N/A)                    P
             » REFLIGHT  P
 8357   8366 Perf_Background_Dpkg.Pcspeedmode                                 Perf_Ext_Tpkg.Vmecon          (N/A)
             »   VMECON  P
 8358   8367 Perf_Background_Dpkg.Psinertvs                                                  0.0          0.001                  0.0
             » 0000E+00  P
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 8359  8368 Perf_Background_Dpkg.Pcpathref                                              Nopath          (N/A)
            »   NOPATH  P
 8360  8369 Perf_Background_Dpkg.Pscurtasvalid                                           False          (N/A)
            »    FALSE  P
 8361  8370 Perf_Background_Dpkg.Pcacconfig                                              Clean          (N/A)
            »        0  P
 8362  8371 Perf_Integration_Dpkg.Pcairbrakes                                           Zeroab          (N/A)
            »   ZEROAB  P
 8363  8372 Perf_Background_Dpkg.Pccuraltcstr.Valid                                      False          (N/A)
            »    FALSE  P
 8364  8373 Perf_Background_Dpkg.Pcprebcalt.Valid                                        False          (N/A)
            »    FALSE  P
 8365  8374 Perf_Background_Dpkg.Psappspdlat                                             False          (N/A)
            »    FALSE  P
 8366  8375 Perf_Background_DPkg.Pshmdecel                                               False          (N/A)
            »    FALSE  P
 8367  8376 Perf_Background_Dpkg.Psconsider_Hm                                           False          (N/A)
            »    FALSE  P
 8368  8377 Perf_Background_Dpkg.Pshxpxdecel                                             False          (N/A)
            »    FALSE  P
 8369  8378 Perf_Background_Dpkg.Psignorehm                                               True          (N/A)
            »     TRUE  P
 8370  8379 Perf_Background_Dpkg.Psstpclbact                                             False          (N/A)
            »    FALSE  P
 8371  8380 Perf_Background_Dpkg.Psstpdesact                                             False          (N/A)
            »    FALSE  P
 8372  8381 Perf_Background_Dpkg.Psenginesoff                                             True          (N/A)
            »     TRUE  P
 8373  8382 Perf_Background_Dpkg.Ac_Anti_Ice                                             False          (N/A)
            »    FALSE  P
 8374  8383 Perf_Background_Dpkg.Ac_Bleeds.Engine_Ai                                     False          (N/A)
            »    FALSE  P
 8375  8384 Perf_Background_Dpkg.Ac_Bleeds.Wing_Ai                                       False          (N/A)
            »    FALSE  P
 8376  8385 Perf_Background_Dpkg.Ac_Bleeds.Air_Cond                                      False          (N/A)
            »    FALSE  P
 8377  8386 Prf_Bkgnd_Pkg:BODY.Valcrzalt                   Perf_Background_Dpkg.Pscrzalt.Valid          (N/A)
            »     TRUE  P
 8378  8387 Perf_Background_Dpkg.Adc_Fg_Valid                                             True          (N/A)
            »     TRUE  P
 8379  8388 Prf_Bkgnd_Pkg:body.Fgspdsvalid                                                True          (N/A)
            »     TRUE  P
 8380  8389 Perf_Background_Dpkg.Pcholdflags.Hmdecel                                     False          (N/A)
            »    FALSE  P
```

```
8381  8390 Perf_Background_Dpkg.Pcholdflags.Hmactive                        False        (N/A)
           »    FALSE  P
8382  8391 Perf_Background_Dpkg.Pcholdflags.Manhmwarn                       False        (N/A)
           »    FALSE  P
8383  8392 Perf_Background_Dpkg.Pcholdflags.Hxpxdecel                       False        (N/A)
           »    FALSE  P
8384  8393 Perf_Background_Dpkg.Pcholdflags.Hxpxactiv                       False        (N/A)
           »    FALSE  P
8385  8394 Perf_Background_Dpkg.Pcholdflags.Hmdistval                       False        (N/A)
           »    FALSE  P
8386  8395 Perf_Background_Dpkg.Pcholdflags.Consider_Hm                     False        (N/A)
           »    FALSE  P
8387  8396 Perf_Integration_Dpkg.Pcdeslimlat.Spdlim                         False        (N/A)
           »    FALSE  P
8388  8397 Perf_Integration_Dpkg.Pcdeslimlat.Icaolim                        False        (N/A)
           »    FALSE  P
8389  8398 Perf_Integration_Dpkg.Pcdeslimlat.Desdecel                       False        (N/A)
           »    FALSE  P
8390  8399 Perf_Background_Dpkg.Pcgmttime.Hour                                  0        (N/A)
           »        0  P
8391  8400 Perf_Background_Dpkg.Pcgmttime.Minute                                0        (N/A)
           »        0  P
8392  8401 Perf_Background_Dpkg.Pcgmttime.Second                                0        (N/A)
           »        0  P
8393  8402 Perf_Background_DPkg.Pscurcas                                     0.0        0.001           0.0
           » 0000E+00  P
8394  8403 Perf_Background_DPkg.Pscurmach                                    0.0        0.001           0.0
           » 0000E+00  P
8395  8404 Perf_Background_DPkg.Pscurtas                                     0.0        0.001           0.0
           » 0000E+00  P
8396  8405 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                         0.0        0.001           0.0
           » 0000E+00  P
8397  8406 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                        0.0        0.001           0.0
           » 0000E+00  P
8398  8407 CTP_A350_PERF_BKGND_Get_Bk_Data.Envelope_Exec                   False        (N/A)
           »    FALSE  P
8399  8408 Perf_Background_Dpkg.Ac_Crosstrack_Error                          0.0        0.001           0.0
           » 0000E+00  P
8400  8409 Get_Cruise_Alt_Called                                            True        (N/A)
           »     TRUE  P
8401  8410 Perf_Background_Dpkg.Noise_Data.Altitude.Valid                   True        (N/A)
           »     TRUE  P
8402  8411 Perf_Background_Dpkg.Noise_Data.Altitude.Data                   300.0        0.001           3.0
           » 0000E+02  P
```

```
Perf_Background_Dpkg.Noise_Data.Speed.Valid                                   False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Secn_Fpln_Itin                                           false          (N/A)
»    FALSE  P
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.valid                     True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.valid                    True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.What_If_Data.Eo_LRC_Maximum_Alt.Data                     32.20          0.001                 3.2
» 2000E+01  P
Perf_Background_Dpkg.What_If_Data.Eo_Gdot_Maximum_Alt.Data                    32.30          0.001                 3.2
» 3000E+01  P
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.valid                     True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data                       5.0          0.001                 5.0
» 0000E+00  P


====> All 65 Comparisons Passed <====


TESTID: 69

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is  not true
   Navigation(Nav Filtered) A/C Altitude is Valid
   Noise End altitude is invalid
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
   the Noise_Thrust_Target from VGUIDE is valid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcactorsec
»   Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»    Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
»    False
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
»     21.0
Perf_Background_Dpkg.Psorgalt
»  36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target                                                                  (10.
» 6, True)
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
»    False
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid
»     True
Navigation_Data.Aircraft_Altitude_Valid
»     True
Navigation_Data.Aircraft_Altitude
»    53.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status              Takeoff_Alt_Types.
» Inactive
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val
»    False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
»     90.0
Perf_Background_Dpkg.Psengout
»     True
Perf_Background_Dpkg.Flex_Isadev.Data
»      5.0
Perf_Background_Dpkg.Noise_Data.Ramping
»     True


OUTPUT                                                          EXPECTED               TOLERANCE             ACTUAL
```

```
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Noise_Data.Ramping                                       False          (N/A)
»    FALSE  P


====> All 1 Comparisons Passed <====


TESTID: 70

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is not true
   Navigation(Nav Filtered) A/C Altitude is invalid
   Noise End altitude is valid
   the Noise_Thrust_Target from VGUIDE is valid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcactorsec
»   Active
```

```
 8505   8514 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »    Climb
 8506   8515 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
             »    False
 8507   8516 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
             »     21.0
 8508   8517 Perf_Background_Dpkg.Psorgalt
             »  36090.0
 8509   8518 Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target                                                       (10.
             » 6, True)
 8510   8519 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
             »    False
 8511   8520 Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid
             »     True
 8512   8521 Navigation_Data.Aircraft_Altitude_Valid
             »    False
 8513   8522 Navigation_Data.Aircraft_Altitude
             »    53.20
 8514   8523 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status                Takeoff_Alt_Type
             » s.Active
 8515   8524 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val
             »    False
 8516   8525 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
             »     90.0
 8517   8526 Perf_Background_Dpkg.Psengout
             »    False
 8518   8527 Perf_Background_Dpkg.Flex_Isadev.Data
             »      5.0
 8519   8528 Perf_Background_Dpkg.Noise_Data.Ramping
             »     True
 8520   8529
 8521   8530
 8522   8531 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
             »           P/F
 8523   8532 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 8524   8533 Perf_Background_Dpkg.Noise_Data.Ramping                                       False          (N/A)
             »    FALSE  P
 8525   8534
 8526   8535
 8527   8536 ====> All 1 Comparisons Passed <====
 8528   8537
 8529   8538
 8530   8539 TESTID: 71
```

```

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
   Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
   initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
   and Perf_Background_Dpkg.Noise_Data.Ramping to true,
   Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
   PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
                  PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )

   in this case,
   the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is not true
   Navigation(Nav Filtered) A/C Altitude is Valid
   Noise End altitude is valid
   the Noise_Thrust_Target from VGUIDE is valid.
   the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude
   current A/C Altitude(Baro corrected) is less than the Noise end altitude(with 1 ft altitude tolerance)
   so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcactorsec
»   Active
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»    Climb
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
»    False
Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
»     21.0
Perf_Background_Dpkg.Psorgalt
»  36090.0
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target                                                                  (10.
» 6, True)
Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
```

```
»    False
Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid
»     True
Navigation_Data.Aircraft_Altitude_Valid
»     True
Navigation_Data.Aircraft_Altitude
»    53.20
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status                Takeoff_Alt_Type
» s.Active
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val
»    False
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
»    300.0
Perf_Background_Dpkg.Psengout
»    False
Perf_Background_Dpkg.Flex_Isadev.Data
»      5.0
Perf_Background_Dpkg.Noise_Data.Ramping
»     True


OUTPUT                                                         EXPECTED              TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Noise_Data.Ramping                                      False          (N/A)
»    FALSE  P


====> All 1 Comparisons Passed <====


TESTID: 72

*When any of the following conditions are satisfied
(1) If the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is true, and the
    Noise_Thrust_Target from VGUIDE is valid.
(2) If all the following conditions are satisfied
   -Navigation(Nav Filtered) A/C Altitude is Valid
   -Noise End altitude is valid
   -Noise_Thrust_Target from VGUIDE is valid
   -if the Navigation(Nav Filtered) A/C altitude is less than the Noise end altitude and
    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft
    altitude tolerance).
```

```
 8599   8608    Then aircraft is currently ramping NADP Noise thrust. If so, predicted noise thrust ramping data shall be
 8600   8609    initialized by setting Perf_Background_Dpkg.Noise_Data.Tspd to the Noise_Thrust_Target,
 8601   8610    and Perf_Background_Dpkg.Noise_Data.Ramping to true,
 8602   8611    Otherwise Perf_Background_Dpkg.Noise_Data.Ramping set to false.
 8603   8612    PERF_SDD_4600( PERF_SRD_12529_INT, PERF_SRD_12507_DR, PERF_SRD_12511_DR, PERF_SRD_12514_DR, PERF_SRD_12517_DR,
 8604   8613                   PERF_SRD_12520_DR, PERF_SRD_12523_DR, PERF_SRD_12530_INT )
 8605   8614
 8606   8615    in this case,
 8607   8616    the Gavpitchdis2.Noise_Thrust_Ramp_Start discrete from VGUIDE is not true
 8608   8617    Navigation(Nav Filtered) A/C Altitude is Valid
 8609   8618    Noise End altitude is valid
 8610   8619    the Noise_Thrust_Target from VGUIDE is valid.
 8611   8620    the Navigation(Nav Filtered) A/C altitude is greater than the Noise end altitude
 8612   8621    current A/C Altitude(Baro corrected) is greater than the Noise end altitude(with 1 ft altitude tolerance)
 8613   8622    so, Perf_Background_Dpkg.Noise_Data.Ramping set to false.
 8614   8623
 8615   8624
 8616   8625 INPUT                                                                                                      VALUE
 8617   8626 ---------------------------------------------------------------------------------------------  -----------------
             » --------
 8618   8627 Perf_Background_Dpkg.Pcactorsec
             »   Active
 8619   8628 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »    Climb
 8620   8629 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Valid
             »    False
 8621   8630 Perf_Background_Dpkg.Flex_Takeoff_Temperature.Data
             »     21.0
 8622   8631 Perf_Background_Dpkg.Psorgalt
             »  36090.0
 8623   8632 Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target                                                            (10.
             » 6, True)
 8624   8633 Guid_Checkpoint_Dpkg.Gavpitchdis2.Noise_Thrust_Ramp_Start
             »    False
 8625   8634 Guid_Checkpoint_Resynch_Dpkg.Noise_Thrust_Target.Valid
             »     True
 8626   8635 Navigation_Data.Aircraft_Altitude_Valid
             »     True
 8627   8636 Navigation_Data.Aircraft_Altitude
             »    93.20
 8628   8637 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt_Status                Takeoff_Alt_Type
             » s.Active
 8629   8638 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_Speed_Val
             »    False
```

```
Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Noise_Abatement_Array(Active).Noise_End_Alt
»     90.0
Perf_Background_Dpkg.Psengout
»    False
Perf_Background_Dpkg.Flex_Isadev.Data
»      5.0
Perf_Background_Dpkg.Noise_Data.Ramping
»     True


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Noise_Data.Ramping                                       False          (N/A)
»    FALSE  P


====> All 1 Comparisons Passed <====


TESTID: 73

     The following data shall be initialized as specified irrespective of the kind of flight plan:
     - Compute old target speed flag (Computoldtgt) = False;
     - Current target speed flag from FG(Curspdsval) = True;
     - Climb auto derate mode active(Use_Clb_Autodrt) = False;
     - First pass of predictions (Psfirstpass) = True;
     - First pass of forward predictions (Psonofrstpas) = True;
     - Flight test write protect (Psftpbwritok) = True;
     - Vertical speed mode active (Psvsact) = False;
     - Flight path angle mode active (Psfpaact) = False;
     - Level at baro-changed constraint altitude (Pslvlatbcalt) = False;
     - Below path and level at an altitude constraint (Pslvlblwpth) = False;
     - Ratio of potential energy to kinetic energy (Potential_To_Kinetic_Share) is initialized to
     ratio of potential energy to kinetic energy applied for integration of descent segments.
     - First pass of predicitions flag repacked for FTB is initialized by flag for first pass
     through predictions;
     - Thrust reduction altitudes (Psthredalt & Psdesthrdalt) are initialized by calling the
     procedure Fpln_Ext_Dpkg.Get_Def_Thrust_Reduction_Alt
     - Unpredicted Fix-Info points exist (Psfi_Possble) = False;
     - Predicted state on decel to ICAO-limited leg (On_Icao_Leg_Decel) = False;
     - Do not search for HM decels (Psignorehm) = False;
     - Previous reason for speed change (Pcoldwspdchg) = Return to econ speed (Returntoecon)
```

```
 8667   8676      - Filtered A/C altitude (Navigation Data) is initialized by current aircraft altitude;
 8668   8677      - Get the below descent path below DSL vertical speed target in FT/SEC by calling
 8669   8678        Guid_Ext_Dpkg.Vs_Target_Below_Speed_Limit and dividing the returned value
 8670   8679        (FT/MIN) by 60.0;
 8671   8680      - Maximum operating CAS and Mach data initialized from database vmo and mmo and
 8672   8681      the delta values obtained by calling Prf_External_Util_Pkg.Get_Maxop_Delta
 8673   8682      - Predicted aircraft configuration (Pcconfig) is set to clean.
 8674   8683      - Flag indicating that the TDP Level segment at or below clearance altitude
 8675   8684      (Tdp_Level_Seg_At_Or_Below_Clralt) is set to False.
 8676   8685      - The flag indicating level prediction is determined in current mode due to clearance
 8677   8686      altitude or due to aircraft flying in level is set to false.
 8678   8687      - The flag indicating the current mode has called state integrator to predict a level1 or
 8679   8688      tod2 pseudo locations on TDP is set to false.
 8680   8689      - The flag indicating clearance altitude set above the descent speed limit and below the
 8681   8690        descent speed limit deceleration start point is set to false.
 8682   8691
 8683   8692      PERF_SDD_4155_INT
 8684   8693
 8685   8694      the working flight plan is  Is_Active,
 8686   8695      a variety of following global data shall be retrieved which are common to the Active flight plan predictions proc
             » ess.
 8687   8696      - A/C is below a NAVDB imposed TDP segment (Below_Navdb_Imposed_Segment) from guidance
 8688   8697      - Guidance provided TDP capture tolerance
 8689   8698      - when the Engine out status and the VG indicator that Green-Dot Speed is latched,
 8690   8699        then the flag indicating that VG is using latched Green-Dot descent speed is set
 8691   8700
 8692   8701      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
 8693   8702                    PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
 8694   8703                    PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
 8695   8704
 8696   8705      the current flight phase is not climb, Flag indicating the speed targets from FG are valid will not be changed.
 8697   8706
 8698   8707     PERF_SDD_08226(PERF_SRD_2801,PERF_SRD_23365,PERF_SRD_23455)
 8699   8708
 8700   8709     Ithe current flight phase is cruise
 8701   8710     the real time cruise speeds are valid for current working flight plan and the real time
 8702   8711     step speeds are valid and a step (climb and descent) is active ,so
 8703   8712     -The original step speeds (CAS and Mach) before speed limiting are set to the real
 8704   8713     time step speeds (CAS and Mach) respectively.
 8705   8714     -The flag indicating Predictions are in step is set based on the Step descent active
 8706   8715     flag from Guidance.
 8707   8716     -The Step CAS and Mach speeds are set to the real time step speeds CAS and Mach
 8708   8717     respectively.
 8709   8718     -Optimum Econ/LRC Cruise CAS and Mach are set to the real time cruise CAS and
```

```
8710  8719     Mach speeds for the active flight plan.
8711  8720
8712  8721    PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
8713  8722
8714  8723    the real time descent speeds are valid for current working flight plan
8715  8724    Optimum Econ/LRC descent CAS and Mach shall set to the real time descent CAS and Mach respectively.
8716  8725
8717  8726    PERF_SDD_09064(PERF_SRD_23503_INT,PERF_SRD_2489)
8718  8727
8719  8728
8720  8729 INPUT                                                                                                          VALUE
8721  8730 --------------------------------------------------------------------------------------------------  ------------------
           » --------
8722  8731 Perf_Background_Dpkg.Use_Clb_Autodrt
           »     True
8723  8732 Perf_Dpkg.Potential_To_Kinetic_Share
           »    200.0
8724  8733 Perf_Dpkg.Des_Potential_To_Kinetic_Share
           »    501.0
8725  8734 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass
           »    False
8726  8735 Perf_Background_Dpkg.Psfirstpass
           »    False
8727  8736 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid
           »    False
8728  8737 Navigation_Data.Aircraft_Altitude_Valid
           »     True
8729  8738 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data
           »   100.00
8730  8739 Navigation_Data.Aircraft_Altitude
           »    93.20
8731  8740 Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred
           »     True
8732  8741 Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred
           »     True
8733  8742 Perf_Background_Dpkg.Pcconfig                                                                      Perf_Config_Dpkg.Fi
           » dconfidx
8734  8743 Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd
           »     True
8735  8744 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment
           »    False
8736  8745 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol
           »   100.00
8737  8746 Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance
```

```
             »   188.00
 8738   8747 Perf_Background_Dpkg.Flight_Plan_Type                                                   Perf_Int_Base_Tpkg.I
             » s_Active
 8739   8748 Perf_Background_Dpkg.Pcactorsec
             »   Active
 8740   8749 Perf_Background_Dpkg.Pcfltphase
             »   Cruise
 8741   8750 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »   Cruise
 8742   8751 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
             »     True
 8743   8752 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas
             »    265.0
 8744   8753 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach
             »     0.55
 8745   8754 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
             »     True
 8746   8755 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas
             »    288.0
 8747   8756 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach
             »     0.66
 8748   8757 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »     True
 8749   8758 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 8750   8759 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 8751   8760 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
             »     True
 8752   8761 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
             »     True
 8753   8762 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec )
             »   100.00
 8754   8763 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec )
             »     0.12
 8755   8764 Perf_Background_Dpkg.Psinstep
             »    False
 8756   8765 Perf_Background_Dpkg.Psstepcas
             »   200.00
 8757   8766 Perf_Background_Dpkg.Psstepmach
             »     0.35
 8758   8767 Perf_Background_Dpkg.Psecncrzmach
             »    200.0
 8759   8768 Perf_Background_Dpkg.Psecncrzcas
```

```
              »     0.55
 8760   8769 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
              »   100.12
 8761   8770 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
              »     0.78
 8762   8771 Perf_Background_Dpkg.Psthredalt
              »    100.0
 8763   8772 Perf_Background_Dpkg.Psdesthrdalt
              »    800.0
 8764   8773 Perf_Background_Dpkg.Tdp_Level_Seg_At_Or_Below_Clralt
              »     true
 8765   8774 Perf_Database_Dpkg.Psmmo
              »     0.45
 8766   8775 Perf_Database_Dpkg.Psvmo
              »      0.0
 8767   8776 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Def_Thrust_Reduction_Alt_Arr(Active).Data(Fprequestrec_Types.Takeoff).Altitude
              »      866
 8768   8777 Fpln_Resync_Dpkg:Body.Fpln_Ext_Data.Def_Thrust_Reduction_Alt_Arr(Active).Data(Fprequestrec_Types.Goaround).Altitude
              »      955
 8769   8778 Perf_Background_Dpkg.Psgrndotdes
              »    False
 8770   8779 Perf_Background_Dpkg.Psengout
              »    False
 8771   8780 Cdk_Vert_Dpkg:Body.Engine_Out_I
              »     true
 8772   8781 Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes
              »     true
 8773   8782 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
              »     True
 8774   8783 Perf_Background_Dpkg.Clralt_Below_Des_Spd_Lim_Decel_Start
              »     True
 8775   8784 Perf_Background_Dpkg.Below_Path_Pred.Below_DSL_VS_Target
              »      0.0
 8776   8785
 8777   8786
 8778   8787  define Get_Def_Thrust_Reduction_Alt_Called := False
 8779   8788  define Get_Maxop_Delta_Called := False
 8780   8789
 8781   8790
 8782   8791 INPUT                                                                                              VALUE
 8783   8792 -----------------------------------------------------------------------------------------------  ------------------
              » --------
 8784   8793 Computoldtgt
              »     True
 8785   8794 Curspdsval
             »    False
 8786   8795 Perf_Background_Dpkg.Psfirstpass
             »    False
 8787   8796 Perf_Background_Dpkg.Psonofrstpas
             »    False
 8788   8797 Perf_Background_Dpkg.Psftpbwritok
             »    False
 8789   8798 Perf_Background_Dpkg.Psvsact
             »     True
 8790   8799 Perf_Background_Dpkg.Psfpaact
             »     True
 8791   8800 Perf_Background_Dpkg.Pslvlatbcalt
             »     True
 8792   8801 Perf_Integration_Dpkg.Pslvlblwpth
             »     True
 8793   8802 Perf_Background_Dpkg.Psfi_Possble
             »     True
 8794   8803 Perf_Background_Dpkg.On_Icao_Leg_Decel
             »     True
 8795   8804 Perf_Background_Dpkg.Psignorehm
             »     True
 8796   8805 Perf_Integration_Dpkg.Pcoldwspdchg                                                                                       Ica
             » olimited
 8797   8806 Perf_Background_Dpkg.Adc_Fg_Valid
             »    False
 8798   8807 Perf_Background_Dpkg.Psenginesoff
             »     True
 8799   8808 Perf_Dpkg.Pcdelspdrec.Predicted
             »     True
 8800   8809 Perf_Background_Dpkg.Pcoldeconcas.Valid
             »     True
 8801   8810
 8802   8811
 8803   8812  define Get_Def_Thrust_Reduction_Alt_Called   := True
 8804   8813  define Get_Maxop_Delta_Called   := True
 8805   8814
 8806   8815
 8807   8816 OUTPUT                                                             EXPECTED                TOLERANCE               ACTUAL
             »           P/F
 8808   8817 ----------------------------------------------------  ----------------------------  ------------  ------------------
             » --------  ----
 8809   8818 Computoldtgt                                                                   False          (N/A)
             »    FALSE  P
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
8810  8819  Curspdsval                                                                     True         (N/A)
            »     TRUE  P
8811  8820
8812  8821
8813  8822  INPUT                                                                                                          VALUE
8814  8823  --------------------------------------------------------------------------------------------------  ------------------
            » --------
8815  8824  Perf_Background_Dpkg.Lim_Max_Op_Cas
            »      5.0
8816  8825  Perf_Background_Dpkg.Lim_Max_Op_Mach
            »      0.0
8817  8826
8818  8827
8819  8828   define Get_Maxop_Delta_Called   := True
8820  8829
8821  8830
8822  8831  OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
            »           P/F
8823  8832  ----------------------------------------------------  -----------------------------  -------------  ------------------
            » --------  ----
8824  8833  Prf_Bkgnd_Pkg:body.Fgspdsvalid                                                 True         (N/A)
            »     TRUE  P
8825  8834  Perf_Background_Dpkg.Psfirstpass                                               True         (N/A)
            »     TRUE  P
8826  8835  Perf_Background_Dpkg.Psonofrstpas                                              True         (N/A)
            »     TRUE  P
8827  8836  Perf_Background_Dpkg.Psftpbwritok                                              True         (N/A)
            »     TRUE  P
8828  8837  Perf_Background_Dpkg.Psvsact                                                  False         (N/A)
            »    FALSE  P
8829  8838  Perf_Background_Dpkg.Psfpaact                                                 False         (N/A)
            »    FALSE  P
8830  8839  Perf_Background_Dpkg.Pslvlatbcalt                                             False         (N/A)
            »    FALSE  P
8831  8840  Perf_Integration_Dpkg.Pslvlblwpth                                             False         (N/A)
            »    FALSE  P
8832  8841  Perf_Background_Dpkg.Psfi_Possble                                             False         (N/A)
            »    FALSE  P
8833  8842  Perf_Background_Dpkg.On_Icao_Leg_Decel                                        False         (N/A)
            »    FALSE  P
8834  8843  Perf_Background_Dpkg.Psignorehm                                               False         (N/A)
            »    FALSE  P
8835  8844  Perf_Integration_Dpkg.Pcoldwspdchg                                     Returntoecon         (N/A)                RETU
            » RNTOECON  P
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
 8836   8845 Get_Def_Thrust_Reduction_Alt_Called                                             True          (N/A)
             »     TRUE  P
 8837   8846 Perf_Background_Dpkg.Use_Clb_Autodrt                                           False          (N/A)
             »    FALSE  P
 8838   8847 Perf_Dpkg.Potential_To_Kinetic_Share                                           501.0          0.001                5.0
             » 1000E+02  P
 8839   8848 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass                              TRUE          (N/A)
             »     TRUE  P
 8840   8849 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid                             TRUE          (N/A)
             »     TRUE  P
 8841   8850 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data                              93.2          0.001                9.3
             » 2000E+01  P
 8842   8851 Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred                          False          (N/A)
             »    FALSE  P
 8843   8852 Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred                                   False          (N/A)
             »    FALSE  P
 8844   8853 Perf_Background_Dpkg.Pcconfig                                Perf_Config_Dpkg.Clean          (N/A)
             »        0  P
 8845   8854 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment                True          (N/A)
             »     TRUE  P
 8846   8855 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol                     188.00          0.001                1.8
             » 8000E+02  P
 8847   8856 Perf_Background_Dpkg.Pcsavstepcas(Perf_Background_Dpkg.Pcactorsec)             288.0          0.001                2.8
             » 8000E+02  P
 8848   8857 Perf_Background_Dpkg.Pcsavstepmac(Perf_Background_Dpkg.Pcactorsec)              0.66          0.001                6.6
             » 0000E-01  P
 8849   8858 Perf_Background_Dpkg.Psinstep                                                   True          (N/A)
             »     TRUE  P
 8850   8859 Perf_Background_Dpkg.Psstepcas                                                 288.0          0.001                2.8
             » 8000E+02  P
 8851   8860 Perf_Background_Dpkg.Psstepmach                                                 0.66          0.001                6.6
             » 0000E-01  P
 8852   8861 Perf_Background_Dpkg.Psecncrzmach                                               0.55          0.001                5.5
             » 0000E-01  P
 8853   8862 Perf_Background_Dpkg.Psecncrzcas                                               265.0          0.001                2.6
             » 5000E+02  P
 8854   8863 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                      265.0          0.001                2.6
             » 5000E+02  P
 8855   8864 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                                      0.55          0.001                5.5
             » 0000E-01  P
 8856   8865 Perf_Background_Dpkg.Psthredalt                                                866.0          0.001                8.6
             » 6000E+02  P
 8857   8866 Perf_Background_Dpkg.Psdesthrdalt                                              955.0          0.001                9.5
             » 5000E+02  P
```

```
Get_Maxop_Delta_Called                                                   True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Lim_Max_Op_Cas                                       0.0          0.001                  0.0
» 0000E+00  P
Perf_Background_Dpkg.Lim_Max_Op_Mach                                     0.45          0.001                  4.5
» 0000E-01  P
Perf_Background_Dpkg.Psgrndotdes                                         true          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Clralt_Below_Des_Spd_Lim_Decel_Start               False          (N/A)
»    FALSE  P
Perf_Background_Dpkg.Below_Path_Pred.Below_DSL_VS_Target               -8.333          0.001                 -8.3
» 3333E+00  P



====> All 42 Comparisons Passed <====


TESTID: 74

       the working flight plan is Copy_From_Active,
       a variety of following global data shall be retrieved which are common to the Active flight plan predictions pr
» ocess.
       - A/C is below a NAVDB imposed TDP segment (Below_Navdb_Imposed_Segment) from
       guidance
       - Guidance provided TDP capture tolerance
      - when the Engine out status and the VG indicator that Green-Dot Speed is latched,
        The flag indicating that VG is using latched Green-Dot descent speed is set.

      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
                   PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
                   PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)

      the current flight phase is cruise
      the real time cruise speeds are not valid for current working flight plan and the real time
      step speeds are valid and a step (climb) is not active and a step (descent) is active , then:
      -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)

      the real time descent speeds are not valid for current working flight plan then
      Optimum Econ/LRC descent CAS and Mach shall not set to the real time descent CAS and Mach respectively.

       PERF_SDD_09064(PERF_SRD_23503_INT,PERF_SRD_2489)

```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
8895   8904
8896   8905 INPUT                                                                                                    VALUE
8897   8906 -------------------------------------------------------------------------------------------  ------------------
            » --------
8898   8907 Perf_Background_Dpkg.Use_Clb_Autodrt
            »     True
8899   8908 Perf_Dpkg.Potential_To_Kinetic_Share
            »    200.0
8900   8909 Perf_Dpkg.Des_Potential_To_Kinetic_Share
            »    501.0
8901   8910 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass
            »    False
8902   8911 Perf_Background_Dpkg.Psfirstpass
            »    False
8903   8912 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid
            »    False
8904   8913 Navigation_Data.Aircraft_Altitude_Valid
            »     True
8905   8914 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data
            »   100.00
8906   8915 Navigation_Data.Aircraft_Altitude
            »    93.20
8907   8916 Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred
            »     True
8908   8917 Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred
            »     True
8909   8918 Perf_Background_Dpkg.Pcconfig                                                         Perf_Config_Dpkg.Fi
            » dconfidx
8910   8919 Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd
            »     True
8911   8920 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment
            »    False
8912   8921 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol
            »   100.00
8913   8922 Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance
            »   188.00
8914   8923 Perf_Background_Dpkg.Flight_Plan_Type                                         Perf_Int_Base_Tpkg.Copy_Fro
            » m_Active
8915   8924 Perf_Background_Dpkg.Pcactorsec
            »   Active
8916   8925 Perf_Background_Dpkg.Pcfltphase
            »   Cruise
8917   8926 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
            »   Cruise
```

```
8918  8927 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
           »    False
8919  8928 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas
           »    265.0
8920  8929 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach
           »     0.55
8921  8930 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
           »     True
8922  8931 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas
           »    288.0
8923  8932 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach
           »     0.66
8924  8933 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
           »    False
8925  8934 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
           »    265.0
8926  8935 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
           »     0.55
8927  8936 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
           »    False
8928  8937 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
           »     True
8929  8938 Cdk_Vert_Dpkg:Body.Engine_Out_I
           »     true
8930  8939 Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes
           »     true
8931  8940 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
           »     True
8932  8941 Prf_Bkgnd_Pkg:body.Fgspdsvalid
           »     True
8933  8942
8934  8943
8935  8944 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
           »           P/F
8936  8945 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
8937  8946 Prf_Bkgnd_Pkg:body.Fgspdsvalid                                                False          (N/A)
           »    FALSE  P
8938  8947 Perf_Background_Dpkg.Use_Clb_Autodrt                                          False          (N/A)
           »    FALSE  P
8939  8948 Perf_Dpkg.Potential_To_Kinetic_Share                                          501.0          0.001                 5.0
           » 1000E+02  P
8940  8949 Perf_Flight_Test_Dpkg.Perf_Repack_Data.Psfirstpass                             TRUE          (N/A)
           »     TRUE  P
```

```
 8941   8950 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Valid                                 TRUE          (N/A)
             »     TRUE  P
 8942   8951 Perf_Background_Dpkg.Nav_Filtered_AC_Altitude.Data                                  93.2          0.001                9.3
             » 2000E+01  P
 8943   8952 Perf_Background_Dpkg.Current_Mode_Level1_Or_Tod2_Pred                              False          (N/A)
             »    FALSE  P
 8944   8953 Perf_Background_Dpkg.Clr_Alt_Level_Path_Pred                                       False          (N/A)
             »    FALSE  P
 8945   8954 Perf_Background_Dpkg.Pcconfig                                     Perf_Config_Dpkg.Clean          (N/A)
             »        0  P
 8946   8955 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment                    True          (N/A)
             »     TRUE  P
 8947   8956 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol                          188.00          0.001                1.8
             » 8000E+02  P
 8948   8957
 8949   8958
 8950   8959 ====> All 11 Comparisons Passed <====
 8951   8960
 8952   8961
 8953   8962 TESTID: 75
 8954   8963
 8955   8964       the current flight phase is cruise
 8956   8965       the real time cruise speeds are valid for current working flight plan and the real time
 8957   8966       step speeds are not valid and  a step (climb) is active and a step (descent) is not active , then:
 8958   8967       -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.
 8959   8968
 8960   8969        PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
 8961   8970
 8962   8971
 8963   8972 INPUT                                                                                              VALUE
 8964   8973 ---------------------------------------------------------------------------------------------  ------------------
             » --------
 8965   8974 Perf_Background_Dpkg.Flight_Plan_Type                                                     Perf_Int_Base_Tpkg.I
             » s_Active
 8966   8975 Perf_Background_Dpkg.Pcactorsec
             »   Active
 8967   8976 Perf_Background_Dpkg.Pcfltphase
             »   Cruise
 8968   8977 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »   Cruise
 8969   8978 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
             »     True
 8970   8979 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
             »    False
 8971   8980 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »     True
 8972   8981 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
             »     True
 8973   8982 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
             »    False
 8974   8983 Cdk_Vert_Dpkg:Body.Engine_Out_I
             »     true
 8975   8984 Guid_Checkpoint_Resynch_Dpkg.Vc3eospdrec.Grndotdes
             »     true
 8976   8985 Prf_Bkgnd_Pkg:body.Fgspdsvalid
             »    False
 8977   8986 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
             »     True
 8978   8987 Prf_Bkgnd_Pkg:body.Fgspdsvalid
             »     True
 8979   8988
 8980   8989
 8981   8990 OUTPUT                                                    EXPECTED                 TOLERANCE                ACTUAL
             »           P/F
 8982   8991 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 8983   8992 Prf_Bkgnd_Pkg:body.Fgspdsvalid                                               False          (N/A)
             »    FALSE  P
 8984   8993
 8985   8994
 8986   8995 ====> All 1 Comparisons Passed <====
 8987   8996
 8988   8997
 8989   8998 TESTID: 76
 8990   8999       Ihe current flight phase is cruise
 8991   9000       the real time cruise speeds are valid for current working flight plan and the real time
 8992   9001       step speeds are valid and a step (climb) is not active and a step (descent)  is not active, then:
 8993   9002       -The original step speeds (CAS and Mach) before speed limiting are set to the real
 8994   9003       time step speeds (CAS and Mach) respectively.
 8995   9004       -The flag indicating Predictions are in step is set based on the Step descent active
 8996   9005       flag from Guidance.
 8997   9006       -The Step CAS and Mach speeds are set to the real time step speeds CAS and Mach
 8998   9007       respectively.
 8999   9008       -Optimum Econ/LRC Cruise CAS and Mach are set to the real time cruise CAS and
 9000   9009       Mach speeds for the active flight plan.
 9001   9010
 9002   9011        PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
 9003   9012
 9004   9013 
 9005   9014 INPUT                                                                                             VALUE
 9006   9015 -------------------------------------------------------------------------------------------------  -----------------
             » --------
 9007   9016 Perf_Background_Dpkg.Flight_Plan_Type                                                             Perf_Int_Base_Tpkg.I
             » s_Active
 9008   9017 Perf_Background_Dpkg.Pcactorsec
             »   Active
 9009   9018 Perf_Background_Dpkg.Pcfltphase
             »   Cruise
 9010   9019 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »   Cruise
 9011   9020 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
             »     True
 9012   9021 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas
             »    265.0
 9013   9022 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach
             »     0.55
 9014   9023 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
             »     True
 9015   9024 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas
             »    288.0
 9016   9025 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach
             »     0.66
 9017   9026 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »     True
 9018   9027 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 9019   9028 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 9020   9029 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
             »    False
 9021   9030 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
             »    False
 9022   9031 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec )
             »   100.00
 9023   9032 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec )
             »     0.12
 9024   9033 Perf_Background_Dpkg.Psinstep
             »     True
 9025   9034 Perf_Background_Dpkg.Psstepcas
             »   200.00
 9026   9035 Perf_Background_Dpkg.Psstepmach
             »     0.35
 9027   9036 Perf_Background_Dpkg.Psecncrzmach
             »    200.0
 9028   9037 Perf_Background_Dpkg.Psecncrzcas
             »     0.55
 9029   9038 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »   100.12
 9030   9039 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »     0.78
 9031   9040 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
             »     True
 9032   9041 Prf_Bkgnd_Pkg:body.Fgspdsvalid
             »     True
 9033   9042
 9034   9043
 9035   9044 OUTPUT                                                          EXPECTED                TOLERANCE             ACTUAL
             »           P/F
 9036   9045 ----------------------------------------------------  ----------------------------  -------------  -----------------
             » --------  ----
 9037   9046 Prf_Bkgnd_Pkg:body.Fgspdsvalid                                             True          (N/A)
             »     TRUE  P
 9038   9047 Perf_Background_Dpkg.Pcsavstepcas(Perf_Background_Dpkg.Pcactorsec)       288.0          0.001                2.8
             » 8000E+02  P
 9039   9048 Perf_Background_Dpkg.Pcsavstepmac(Perf_Background_Dpkg.Pcactorsec)        0.66          0.001                6.6
             » 0000E-01  P
 9040   9049 Perf_Background_Dpkg.Psinstep                                            False          (N/A)
             »    FALSE  P
 9041   9050 Perf_Background_Dpkg.Psstepcas                                           288.0          0.001                2.8
             » 8000E+02  P
 9042   9051 Perf_Background_Dpkg.Psstepmach                                           0.66          0.001                6.6
             » 0000E-01  P
 9043   9052 Perf_Background_Dpkg.Psecncrzmach                                         0.55          0.001                5.5
             » 0000E-01  P
 9044   9053 Perf_Background_Dpkg.Psecncrzcas                                         265.0          0.001                2.6
             » 5000E+02  P
 9045   9054 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                265.0          0.001                2.6
             » 5000E+02  P
 9046   9055 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                                0.55          0.001                5.5
             » 0000E-01  P
 9047   9056
 9048   9057
 9049   9058 ====> All 10 Comparisons Passed <====
 9050   9059
 9051   9060
 9052   9061 TESTID: 77
```

```

      the current flight phase is cruise
      the real time cruise speeds are not valid for current working flight plan and the real time
      step speeds are valid and a step (climb and descent) is active, then:
      -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                             Perf_Int_Base_Tpkg.I
» s_Active
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.Pcfltphase
»   Cruise
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»   Cruise
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
»    False
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
»     True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
»     True
Prf_Bkgnd_Pkg:body.Fgspdsvalid
»     True


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Prf_Bkgnd_Pkg:body.Fgspdsvalid                                                False          (N/A)
»    FALSE  P


====> All 1 Comparisons Passed <====


TESTID: 78

      the current flight phase is cruise
      the real time cruise speeds are  valid for current working flight plan and the real time
      step speeds are not valid and a step (climb and descent) is active, then:
      -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)


INPUT                                                                                                    VALUE
-------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                              Perf_Int_Base_Tpkg.I
» s_Active
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.Pcfltphase
»   Cruise
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»   Cruise
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
»     True
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
»    False
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
»     True
Prf_Bkgnd_Pkg:body.Fgspdsvalid
»     True


OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  ------------  ------------------
» --------  ----
Prf_Bkgnd_Pkg:body.Fgspdsvalid                                              False          (N/A)
»    FALSE  P


```

```
====> All 1 Comparisons Passed <====


TESTID: 79

      the current flight phase is cruise
      the real time cruise speeds are  valid for current working flight plan and the real time
      step speeds are not valid and a step Climb is not active,descent is active then:
      -Flag indicating the speed targets from FG are valid (Fgspdsvalid) is set to False.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)


INPUT                                                                                                       VALUE
-----------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                  Perf_Int_Base_Tpkg.I
» s_Active
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.Pcfltphase
»   Cruise
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»   Cruise
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
»     True
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
»    False
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
»     True
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
»    False
Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
»     True
Prf_Bkgnd_Pkg:body.Fgspdsvalid
»     True


OUTPUT                                                              EXPECTED              TOLERANCE             ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  ------------  ------------------
» --------  ----
Prf_Bkgnd_Pkg:body.Fgspdsvalid                                                 False          (N/A)
»    FALSE  P
```

```


====> All 1 Comparisons Passed <====


TESTID: 80
      Ihe current flight phase is cruise
      the real time cruise speeds are valid for current working flight plan and the real time
      step speeds are valid and a step (climb) is active and a step (descent)  is not active, then:
      -The original step speeds (CAS and Mach) before speed limiting are set to the real
      time step speeds (CAS and Mach) respectively.
      -The flag indicating Predictions are in step is set based on the Step descent active
      flag from Guidance.
      -The Step CAS and Mach speeds are set to the real time step speeds CAS and Mach
      respectively.
      -Optimum Econ/LRC Cruise CAS and Mach are set to the real time cruise CAS and
      Mach speeds for the active flight plan.

       PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)


INPUT                                                                                                     VALUE
---------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                               Perf_Int_Base_Tpkg.I
» s_Active
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.Pcfltphase
»   Cruise
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»   Cruise
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
»     True
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas
»    265.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach
»     0.55
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
»     True
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas
»    288.0
Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach
»     0.66
```

```
 9176   9185 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »     True
 9177   9186 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 9178   9187 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 9179   9188 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
             »     True
 9180   9189 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
             »    False
 9181   9190 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec )
             »   100.00
 9182   9191 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec )
             »     0.12
 9183   9192 Perf_Background_Dpkg.Psinstep
             »     True
 9184   9193 Perf_Background_Dpkg.Psstepcas
             »   200.00
 9185   9194 Perf_Background_Dpkg.Psstepmach
             »     0.35
 9186   9195 Perf_Background_Dpkg.Psecncrzmach
             »    200.0
 9187   9196 Perf_Background_Dpkg.Psecncrzcas
             »     0.55
 9188   9197 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »   100.12
 9189   9198 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »     0.78
 9190   9199 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
             »     True
 9191   9200
 9192   9201
 9193   9202 OUTPUT                                                        EXPECTED              TOLERANCE             ACTUAL
             »           P/F
 9194   9203 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 9195   9204 Perf_Background_Dpkg.Pcsavstepcas(Perf_Background_Dpkg.Pcactorsec)           288.0          0.001                    2.8
             » 8000E+02  P
 9196   9205 Perf_Background_Dpkg.Pcsavstepmac(Perf_Background_Dpkg.Pcactorsec)            0.66          0.001                    6.6
             » 0000E-01  P
 9197   9206 Perf_Background_Dpkg.Psinstep                                                False          (N/A)
             »    FALSE  P
 9198   9207 Perf_Background_Dpkg.Psstepcas                                               288.0          0.001                    2.8
             » 8000E+02  P
```

```
9199  9208 Perf_Background_Dpkg.Psstepmach                                                     0.66           0.001                   6.6
           » 0000E-01  P
9200  9209 Perf_Background_Dpkg.Psecncrzmach                                                   0.55           0.001                   5.5
           » 0000E-01  P
9201  9210 Perf_Background_Dpkg.Psecncrzcas                                                   265.0           0.001                   2.6
           » 5000E+02  P
9202  9211 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                          265.0           0.001                   2.6
           » 5000E+02  P
9203  9212 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                                           0.55           0.001                   5.5
           » 0000E-01  P
9204  9213
9205  9214
9206  9215 ====> All 9 Comparisons Passed <====
9207  9216
9208  9217
9209  9218 TESTID: 81
9210  9219       Ihe current flight phase is cruise
9211  9220       the real time cruise speeds are valid for current working flight plan and the real time
9212  9221       step speeds are valid and a step (climb) is not active and a step (descent)  is active, then:
9213  9222       -The original step speeds (CAS and Mach) before speed limiting are set to the real
9214  9223       time step speeds (CAS and Mach) respectively.
9215  9224       -The flag indicating Predictions are in step is set based on the Step descent active
9216  9225       flag from Guidance.
9217  9226       -The Step CAS and Mach speeds are set to the real time step speeds CAS and Mach
9218  9227       respectively.
9219  9228       -Optimum Econ/LRC Cruise CAS and Mach are set to the real time cruise CAS and
9220  9229       Mach speeds for the active flight plan.
9221  9230
9222  9231        PERF_SDD_09063(PERF_SRD_23478,PERF_SRD_23491)
9223  9232
9224  9233
9225  9234 INPUT                                                                                                                VALUE
9226  9235 ---------------------------------------------------------------------------------------------------  ------------------
           » --------
9227  9236 Perf_Background_Dpkg.Flight_Plan_Type                                                                     Perf_Int_Base_Tpkg.I
           » s_Active
9228  9237 Perf_Background_Dpkg.Pcactorsec
           »   Active
9229  9238 Perf_Background_Dpkg.Pcfltphase
           »   Cruise
9230  9239 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
           »   Cruise
9231  9240 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Valid
           »     True
```

```
 9232   9241 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Cas
             »    265.0
 9233   9242 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Cruise).Mach
             »     0.55
 9234   9243 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Valid
             »     True
 9235   9244 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Cas
             »    288.0
 9236   9245 Perf_Rt_Speeds_Dpkg:body.data_storage.Step_Speeds(Active).Mach
             »     0.66
 9237   9246 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Valid
             »     True
 9238   9247 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Cas
             »    265.0
 9239   9248 Perf_Rt_Speeds_Dpkg:body.data_storage.Perf_Speeds(Active)(Descent).Mach
             »     0.55
 9240   9249 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
             »    False
 9241   9250 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
             »     True
 9242   9251 Perf_Background_Dpkg.Pcsavstepcas( Perf_Background_Dpkg.Pcactorsec )
             »   100.00
 9243   9252 Perf_Background_Dpkg.Pcsavstepmac( Perf_Background_Dpkg.Pcactorsec )
             »     0.12
 9244   9253 Perf_Background_Dpkg.Psinstep
             »     True
 9245   9254 Perf_Background_Dpkg.Psstepcas
             »   200.00
 9246   9255 Perf_Background_Dpkg.Psstepmach
             »     0.35
 9247   9256 Perf_Background_Dpkg.Psecncrzmach
             »    200.0
 9248   9257 Perf_Background_Dpkg.Psecncrzcas
             »     0.55
 9249   9258 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »   100.12
 9250   9259 Perf_Background_Dpkg.Pcoptinitspd.Des.Mach
             »     0.78
 9251   9260 Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.Speed_Target
             »     True
 9252   9261
 9253   9262
 9254   9263 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
             »           P/F
```

```
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcsavstepcas(Perf_Background_Dpkg.Pcactorsec)            288.0          0.001                 2.8
» 8000E+02  P
Perf_Background_Dpkg.Pcsavstepmac(Perf_Background_Dpkg.Pcactorsec)             0.66          0.001                 6.6
» 0000E-01  P
Perf_Background_Dpkg.Psinstep                                                  True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Psstepcas                                                288.0          0.001                 2.8
» 8000E+02  P
Perf_Background_Dpkg.Psstepmach                                                0.66          0.001                 6.6
» 0000E-01  P
Perf_Background_Dpkg.Psecncrzmach                                              0.55          0.001                 5.5
» 0000E-01  P
Perf_Background_Dpkg.Psecncrzcas                                              265.0          0.001                 2.6
» 5000E+02  P
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                     265.0          0.001                 2.6
» 5000E+02  P
Perf_Background_Dpkg.Pcoptinitspd.Des.Mach                                     0.55          0.001                 5.5
» 0000E-01  P


====> All 9 Comparisons Passed <====


TESTID: 82

Verify the working flight plan is Is_Active, a variety of following global data shall be
retrieved which are common to the Active flight plan predictions process.
- Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
   Data and Valid values respectively.
- Guidance provided PFD display speed and its validity.
PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
                   PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
                   PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data
»      0.0
```

```
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid
»    False
Guid_Spds_Dpkg.Pfd_Display_Speed.Valid
»     True
Guid_Spds_Dpkg.Pfd_Display_Speed.Data
»      1.0
Perf_Background_Dpkg.Pfd_Display_Speed.Valid
»    False
Perf_Background_Dpkg.Pfd_Display_Speed.Data
»      0.0


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data                      5.0          0.001                 5.0
» 0000E+00  P
Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid                    True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Pfd_Display_Speed.Valid                                  True          (N/A)
»     TRUE  P
Perf_Background_Dpkg.Pfd_Display_Speed.Data                                    1.0          0.001                 1.0
» 0000E+00  P


====> All 4 Comparisons Passed <====


TESTID: 83

Verify the working flight plan is Copy_From_Active, a variety of following global data shall be
retrieved which are common to the Active flight plan predictions process.
- Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
   Data and Valid values respectively.
- Guidance provided PFD display speed and its validity.
In this case: the validity is false.
PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
                   PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
                   PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
```

```
                » --------
  9319   9328 Perf_Background_Dpkg.Flight_Plan_Type                                                                  Copy_Fro
              » m_Active
  9320   9329 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data
              »      0.0
  9321   9330 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid
              »    False
  9322   9331 Guid_Spds_Dpkg.Pfd_Display_Speed.Valid
              »    False
  9323   9332 Guid_Spds_Dpkg.Pfd_Display_Speed.Data
              »      0.0
  9324   9333 Perf_Background_Dpkg.Pfd_Display_Speed.Valid
              »     True
  9325   9334 Perf_Background_Dpkg.Pfd_Display_Speed.Data
              »      1.0
  9326   9335
  9327   9336
  9328   9337 OUTPUT                                                          EXPECTED              TOLERANCE             ACTUAL
              »          P/F
  9329   9338 ----------------------------------------------------  ----------------------------  -------------  -----------------
              » --------  ----
  9330   9339 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data                  5.0          0.001                  5.0
              » 0000E+00  P
  9331   9340 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid                True          (N/A)
              »     TRUE  P
  9332   9341 Perf_Background_Dpkg.Pfd_Display_Speed.Valid                             False          (N/A)
              »    FALSE  P
  9333   9342 Perf_Background_Dpkg.Pfd_Display_Speed.Data                                0.0          0.001                  0.0
              » 0000E+00  P
  9334   9343
  9335   9344
  9336   9345 ====> All 4 Comparisons Passed <====
  9337   9346
  9338   9347
  9339   9348 TESTID: 84
  9340   9349
  9341   9350 Verify the working flight plan is Indep_From_Active,a variety of following global data be not retrieved
  9342   9351      - A/C altitude and its validity
  9343   9352      - A/C position
  9344   9353      - A/C track and its validity
  9345   9354      - A/C ground speed and its validity
  9346   9355      - Wind bearing
  9347   9356      - Wind magnitude
  9348   9357      - Wind validity
```

```
 9349  9358      - Health status of Engines (Inboard and Outboard Engines of Captain and FO)
 9350  9359      - Throttle lever angle (Inboard and Outboard Engines of Captain and FO)
 9351  9360      - A/C flightphase
 9352  9361      - Clock time
 9353  9362      - FE maneuver speed and validity
 9354  9363      - Airborne flag
 9355  9364        when Io_Fms_Aircraft_State_Dpkg.Is_Airborne is true
 9356  9365        and Perf_Background_Dpkg.Pcfltphase is not Preflight and Done;
 9357  9366      - Lateral auto mode flag
 9358  9367      - Current aircraft cross track error from guidance.
 9359  9368      - Level change auto control mode flag
 9360  9369      - Vertical auto mode flag
 9361  9370      - Third altitude from guidance
 9362  9371      - Current altitude constraint management related data(Pccuraltcstr) from guidance
 9363  9372      - Previous captured barometric altitude related data (Pcprebcalt) from guidance
 9364  9373      - A/C is descending from level segment or alt constraint (Early_Descent_From_Level) from guidance
 9365  9374      - Engine-out flag
 9366  9375      - Engines off status
 9367  9376      - Number of engines out via Prf_Aeroeng_Pkg.Get_Num_Eng_Out
 9368  9377      -when Perf_Background_Dpkg.Pcpathref is not Onpath the descent path is not be captured
 9369  9378      - Cruise altitude from Fpln_Ext_Dpkg.Get_Cruise_Alt
 9370  9379      - Set the next applicable cruise altitude variable Data and vaild fields with the Cruise altitude
 9371  9380        Data and Valid values respectively.
 9372  9381      - when Sel_Src_Inertial_Vert_Speed is valid, A/C inertial vertical speed is Io_Common_Irs_Dpkg.Data
 9373  9382      - Speed mode from Guid_Ext_Dpkg.Va3vertmde
 9374  9383      - Active Speed Restriction Annunciation from Guid_Ext_Dpkg.Active_Speed_Restriction
 9375  9384      -  when Io_Fg_Fm_Internal_Dpkg.Altitude_Hold_Mode_Activeis valid, Altitude Hold mode flag status from FMGC via th
            » e interface
 9376  9385      - Final descent mode flag from FMGC armed or active status via the interfaces
 9377  9386         Io_Fg_Fm_Internal_Dpkg.Final_Descent_Mode_Active.Data and
 9378  9387         Io_Fg_Fm_Internal_Dpkg.Final_Descent_Mode_Armed.Data
 9379  9388      - A/C configuration via Prf_Acstate_Pkg.Get_Ac_Config
 9380  9389      - A/C airbrake extension indicator to zero airbrake
 9381  9390      - Step climb & step descent active flags (Psstpclbact & Psstpdesact) are set from guidance.
 9382  9391      -  when the Engine out status and the VG indicator that Green-Dot Speed is not latched,
 9383  9392      then the flag indicating that VG is using latched Green-Dot descent speed is not set
 9384  9393     - Guidance provided PFD display speed and its validity when the valid is true.
 9385  9394      PERF_SDD_0409 (PERF_SRD_6057, PERF_SRD_10166_INT, PERF_SRD_10167_INT, PERF_SRD_10168_INT, PERF_SRD_10198_INT,
 9386  9395      PERF_SRD_10200_INT, PERF_SRD_10199_INT,  PERF_SRD_1490_INT, PERF_SRD_12370_INT, PERF_SRD_12409_INT,
 9387  9396      PERF_SRD_1358,PERF_SRD_23387, PERF_SRD_23965, PERF_SRD_24100, PERF_SRD_6005_INT)
 9388  9397
 9389  9398
 9390  9399 INPUT                                                                                                         VALUE
 9391  9400 -----------------------------------------------------------------------------------------------  -----------------
```

```
              » --------
 9392   9401 Perf_Background_Dpkg.Flight_Plan_Type                                                                 Indep_Fro
              » m_Active
 9393   9402 Perf_Background_Dpkg.Pcactorsec                                                                               S
              » econdary
 9394   9403 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
              »     True
 9395   9404 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Valid
              »     True
 9396   9405 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_LRC_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
              »    32.20
 9397   9406 Perf_To_Cdck_Dpkg:body.Data_Storage.WI_EO_GDOT_Maximum_Alt(Perf_Background_Dpkg.Pcactorsec).Data
              »    32.30
 9398   9407 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data
              »      0.0
 9399   9408 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid
              »    False
 9400   9409 Guid_Spds_Dpkg.Pfd_Display_Speed.Valid
              »     True
 9401   9410 Guid_Spds_Dpkg.Pfd_Display_Speed.Data
              »      1.0
 9402   9411 Perf_Background_Dpkg.Pfd_Display_Speed.Valid
              »    False
 9403   9412 Perf_Background_Dpkg.Pfd_Display_Speed.Data
              »      0.0
 9404   9413 Perf_Background_Dpkg.Pcgmttime.Hour
              »        0
 9405   9414 Perf_Background_Dpkg.Pcgmttime.Minute
              »        0
 9406   9415 Perf_Background_Dpkg.Pcgmttime.Second
              »        0
 9407   9416 Perf_Background_Dpkg.Psairborne
              »     True
 9408   9417 Perf_Background_Dpkg.Ac_Crosstrack_Error
              »      1.0
 9409   9418 Perf_Background_Dpkg.Psautolat
              »     True
 9410   9419 Perf_Background_Dpkg.Psengout
              »     True
 9411   9420 Perf_Background_Dpkg.Psenginesoff
              »     True
 9412   9421 Perf_Background_Dpkg.Psvgonpath
              »     True
 9413   9422 Perf_Integration_DPkg.Pcairbrakes
```

```
                »   Fullab
 9414   9423 Perf_Background_Dpkg.Psstpclbact
                »    False
 9415   9424 Perf_Background_Dpkg.Psstpdesact
                »    False
 9416   9425 Perf_Background_Dpkg.Pcmanspd.Speed.CAS
                »      1.0
 9417   9426 Perf_Background_Dpkg.Pcmanspd.CASVALID
                »     True
 9418   9427 Perf_Background_Dpkg.Pcmanspd.Speed.MACH
                »      1.0
 9419   9428 Perf_Background_Dpkg.Pcmanspd.MACHVALID
                »     True
 9420   9429 Perf_Background_Dpkg.Pccuraltcstr.Data
                »      1.0
 9421   9430 Perf_Background_Dpkg.Pccuraltcstr.Valid
                »     True
 9422   9431 Perf_Background_Dpkg.Pccuraltcstr.Legidx
                »        1
 9423   9432 Perf_Background_Dpkg.Pccuraltcstr.Lgidval
                »     True
 9424   9433 Perf_Background_Dpkg.Pccuraltcstr.Usevga
                »     True
 9425   9434 Perf_Background_Dpkg.Pccuraltcstr.Vgaidx
                »        1
 9426   9435 Perf_Background_Dpkg.Pcprebcalt.Data
                »      1.0
 9427   9436 Perf_Background_Dpkg.Pcprebcalt.Valid
                »     True
 9428   9437 Perf_Background_Dpkg.Pc3rdalt.Data
                »      1.0
 9429   9438 Perf_Background_Dpkg.Pc3rdalt.Valid
                »     True
 9430   9439 Perf_Background_Dpkg.Pslcautoctl
                »     True
 9431   9440 Perf_Background_Dpkg.Vert_Auto_Mode
                »     True
 9432   9441 Perf_Background_Dpkg.Early_Descent_From_Level
                »    False
 9433   9442 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment
                »    False
 9434   9443 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol
                »      1.0
 9435   9444 Perf_Background_Dpkg.Psinertvs
```

```
             »      0.0
 9436  9445  Perf_Background_Dpkg.Speed_Annunciation.Cas
             »      0.0
 9437  9446  Perf_Background_Dpkg.Speed_Annunciation.Alt
             »      0.0
 9438  9447  Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type                                                     Vg_Ext_Tpkg
             » .Invalid
 9439  9448  Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                                                                    "
             »        "
 9440  9449  Perf_Background_Dpkg.Altholdmode
             »    False
 9441  9450  Perf_Background_Dpkg.Psgrndotdes
             »    False
 9442  9451  Perf_Background_Dpkg.Vman_Fe.Data
             »      1.0
 9443  9452  Perf_Background_Dpkg.Vman_Fe.Valid
             »     True
 9444  9453  Perf_Background_Dpkg.Pcspeedmode                                                                          Perf_Ext_Tpk
             » g.Vmecon
 9445  9454  Guid_Ext_Dpkg.Galxtk
             »     2.49
 9446  9455  Fmcs_Partition_Data_Pkg.Ops_Time.Hour
             »        2
 9447  9456  Fmcs_Partition_Data_Pkg.Ops_Time.Minute
             »        2
 9448  9457  Fmcs_Partition_Data_Pkg.Ops_Time.Second
             »        2
 9449  9458  Guid_Ext_Dpkg.Active_Speed_Restriction.Cas
             »    330.0
 9450  9459  Guid_Ext_Dpkg.Active_Speed_Restriction.Alt
             »  15500.0
 9451  9460  Guid_Ext_Dpkg.Active_Speed_Restriction.Speed_Lim_Type                                                  Vg_Ext_Tpkg.Des
             » _Spd_Lim
 9452  9461  Guid_Ext_Dpkg.Active_Speed_Restriction.Wpt_Ident                                                                     "
             » ABCDEFG"
 9453  9462  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.io_frame_1_120_blk0_validity_rec.FRAME_120_Disc_Word_3
             »     true
 9454  9463  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_3.Altitude_Hold_Mode_Active
             »     true
 9455  9464  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engine_Healthy_1_Inboard
             »     True
 9456  9465  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.FRAME_40_Disc_Word_5
             »     True
 9457  9466  Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engine_Healthy_2_Inboard
```

```
            »     True
 9458  9467 Guid_Checkpoint_Resynch_Dpkg.Vc3Cstrduald.Isbdatablock.Cstraltlim
            »     True
 9459  9468 Vertical_Guidance_Fast_Dpkg.Aircraft_Below_Navdb_Imposed_Segment_Fgnd
            »     True
 9460  9469 Vertical_Guidance_Fast_Dpkg.Non_Level_Path_Alt_Error_Capture_Tolerance
            »      2.0
 9461  9470 Guid_Ext_Dpkg.Va3Vertmde                                                                                           Perf_Ext_Tpk
            » g.Vmnone
 9462  9471 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Clbact
            »     True
 9463  9472 Guid_Checkpoint_Resynch_Dpkg.Vc3stepflags.Desact
            »     True
 9464  9473
 9465  9474
 9466  9475  define Perf_Get_State_Pkg_Get_State_called := False
 9467  9476  define Fpln_Ext_Dpkg_Get_Flight_Phase_called := False
 9468  9477  define Prf_Aeroeng_Pkg_Get_Num_Eng_Out_called := False
 9469  9478  define Fpln_Ext_Dpkg_Get_Cruise_Alt_called := False
 9470  9479  define Prf_Acstate_Pkg_Get_Ac_Config_called := False
 9471  9480  define Perf_Get_State_Pkg_Get_State_called := True
 9472  9481  define Fpln_Ext_Dpkg_Get_Flight_Phase_called := True
 9473  9482  define Prf_Aeroeng_Pkg_Get_Num_Eng_Out_called := True
 9474  9483  define Fpln_Ext_Dpkg_Get_Cruise_Alt_called := True
 9475  9484  define Prf_Acstate_Pkg_Get_Ac_Config_called := True
 9476  9485
 9477  9486
 9478  9487 INPUT                                                                                                             VALUE
 9479  9488 ---------------------------------------------------------------------------------------------  -----------------
            » --------
 9480  9489 Eng_Healthy1_Inboard
            »    False
 9481  9490 Eng_Healthy1_Outboard
            »    False
 9482  9491 Eng_Healthy2_Inboard
            »    False
 9483  9492 Eng_Healthy2_Outboard
            »    False
 9484  9493 Tla_Ecu1_Inboard.Data
            »      0.0
 9485  9494 Tla_Ecu1_Inboard.Valid
            »    False
 9486  9495 Tla_Ecu1_Outboard.Data
            »      1.0
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
9487  9496 Tla_Ecu1_Outboard.Valid
           »     True
9488  9497 Tla_Ecu2_Inboard.Data
           »      0.0
9489  9498 Tla_Ecu2_Inboard.Valid
           »    False
9490  9499 Tla_Ecu2_Outboard.Data
           »      1.0
9491  9500 Tla_Ecu2_Outboard.Valid
           »     True
9492  9501
9493  9502
9494  9503 OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
           »           P/F
9495  9504 ----------------------------------------------------  -----------------------------  -------------  ------------------
           » --------  ----
9496  9505 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Data                       0.0          0.001                0.0
           » 0000E+00  P
9497  9506 Perf_Background_Dpkg.Next_Applicable_Cruise_Altitude.Valid                    False          (N/A)
           »    FALSE  P
9498  9507 Eng_Healthy1_Inboard                                                          False          (N/A)
           »    FALSE  P
9499  9508 Eng_Healthy1_Outboard                                                         False          (N/A)
           »    FALSE  P
9500  9509 Eng_Healthy2_Inboard                                                          False          (N/A)
           »    FALSE  P
9501  9510 Eng_Healthy2_Outboard                                                         False          (N/A)
           »    FALSE  P
9502  9511 Tla_Ecu1_Inboard.Data                                                           0.0          0.001                0.0
           » 0000E+00  P
9503  9512 Tla_Ecu1_Inboard.Valid                                                        False          (N/A)
           »    FALSE  P
9504  9513 Tla_Ecu1_Outboard.Data                                                          1.0          0.001                1.0
           » 0000E+00  P
9505  9514 Tla_Ecu1_Outboard.Valid                                                        True          (N/A)
           »     TRUE  P
9506  9515 Tla_Ecu2_Inboard.Data                                                           0.0          0.001                0.0
           » 0000E+00  P
9507  9516 Tla_Ecu2_Inboard.Valid                                                        False          (N/A)
           »    FALSE  P
9508  9517 Tla_Ecu2_Outboard.Data                                                          1.0          0.001                1.0
           » 0000E+00  P
9509  9518 Tla_Ecu2_Outboard.Valid                                                        True          (N/A)
           »     TRUE  P
```

```
 9510   9519 Fpln_Ext_Dpkg_Get_Cruise_Alt_called                                                    False          (N/A)
             »    FALSE  P
 9511   9520 Perf_Background_Dpkg.Psairborne                                                         True          (N/A)
             »     TRUE  P
 9512   9521 Perf_Background_Dpkg.Ac_Crosstrack_Error                                                 1.0          0.001                1.0
             » 0000E+00  P
 9513   9522 Perf_Background_Dpkg.Pccuraltcstr.Valid                                                 True          (N/A)
             »     TRUE  P
 9514   9523 Perf_Background_Dpkg.Pcprebcalt.Valid                                                   True          (N/A)
             »     TRUE  P
 9515   9524 Perf_Integration_DPkg.Pcairbrakes                                                     Fullab          (N/A)
             »   FULLAB  P
 9516   9525 Perf_Background_Dpkg.Psengout                                                           True          (N/A)
             »     TRUE  P
 9517   9526
 9518   9527
 9519   9528  define Fpln_Ext_Dpkg_Get_Cruise_Alt_called := True
 9520   9529
 9521   9530
 9522   9531 OUTPUT                                                              EXPECTED                 TOLERANCE              ACTUAL
             »           P/F
 9523   9532 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 9524   9533 Perf_Background_Dpkg.Pfd_Display_Speed.Valid                                           False          (N/A)
             »    FALSE  P
 9525   9534 Perf_Background_Dpkg.Pfd_Display_Speed.Data                                              0.0          0.001                0.0
             » 0000E+00  P
 9526   9535 Perf_Get_State_Pkg_Get_State_called                                                    False          (N/A)
             »    FALSE  P
 9527   9536 Fpln_Ext_Dpkg_Get_Flight_Phase_called                                                  False          (N/A)
             »    FALSE  P
 9528   9537 Prf_Aeroeng_Pkg_Get_Num_Eng_Out_called                                                 False          (N/A)
             »    FALSE  P
 9529   9538 Prf_Acstate_Pkg_Get_Ac_Config_called                                                   False          (N/A)
             »    FALSE  P
 9530   9539 Perf_Background_Dpkg.Pcgmttime.Hour                                                        0          (N/A)
             »        0  P
 9531   9540 Perf_Background_Dpkg.Pcgmttime.Minute                                                      0          (N/A)
             »        0  P
 9532   9541 Perf_Background_Dpkg.Pcgmttime.Second                                                      0          (N/A)
             »        0  P
 9533   9542 Perf_Background_Dpkg.Vman_Fe.Data                                                        1.0          0.001                1.0
             » 0000E+00  P
 9534   9543 Perf_Background_Dpkg.Vman_Fe.Valid                                                      True          (N/A)
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
           » TRUE P
 9535  9544 Perf_Background_Dpkg.Psautolat                                          True       (N/A)
           » TRUE P
 9536  9545 Perf_Background_Dpkg.Psenginesoff                                       True       (N/A)
           » TRUE P
 9537  9546 Perf_Background_Dpkg.Pc3rdalt.Data                                       1.0       0.001            1.0
           » 0000E+00 P
 9538  9547 Perf_Background_Dpkg.Pc3rdalt.Valid                                     True       (N/A)
           » TRUE P
 9539  9548 Perf_Background_Dpkg.Pslcautoctl                                        True       (N/A)
           » TRUE P
 9540  9549 Perf_Background_Dpkg.Vert_Auto_Mode                                     True       (N/A)
           » TRUE P
 9541  9550 Perf_Background_Dpkg.Pccuraltcstr.Data                                   1.0       0.001            1.0
           » 0000E+00 P
 9542  9551 Perf_Background_Dpkg.Pccuraltcstr.Legidx                                   1       (N/A)
           »    1 P
 9543  9552 Perf_Background_Dpkg.Pccuraltcstr.Lgidval                               True       (N/A)
           » TRUE P
 9544  9553 Perf_Background_Dpkg.Pccuraltcstr.Usevga                                True       (N/A)
           » TRUE P
 9545  9554 Perf_Background_Dpkg.Pccuraltcstr.Vgaidx                                   1       (N/A)
           »    1 P
 9546  9555 Perf_Background_Dpkg.Pcprebcalt.Data                                     1.0       0.001            1.0
           » 0000E+00 P
 9547  9556 Perf_Background_Dpkg.Early_Descent_From_Level                           False       (N/A)
           » FALSE P
 9548  9557 Perf_Background_Dpkg.Below_Path_Pred.Below_Navdb_Imposed_Segment        False       (N/A)
           » FALSE P
 9549  9558 Perf_Background_Dpkg.Below_Path_Pred.VG_Path_Capture_Tol                 1.0       0.001            1.0
           » 0000E+00 P
 9550  9559 Perf_Background_Dpkg.Psvgonpath                                         True       (N/A)
           » TRUE P
 9551  9560 Perf_Background_Dpkg.Psinertvs                                           0.0       0.001            0.0
           » 0000E+00 P
 9552  9561 Perf_Background_Dpkg.Pcspeedmode                         Perf_Ext_Tpkg.Vmecon       (N/A)
           » VMECON P
 9553  9562 Perf_Background_Dpkg.Speed_Annunciation.Cas                              0.0       0.001            0.0
           » 0000E+00 P
 9554  9563 Perf_Background_Dpkg.Speed_Annunciation.Alt                              0.0       0.001            0.0
           » 0000E+00 P
 9555  9564 Perf_Background_Dpkg.Speed_Annunciation.Speed_Lim_Type    Vg_Ext_Tpkg.Invalid       (N/A)
           » INVALID P
 9556  9565 Perf_Background_Dpkg.Speed_Annunciation.Wpt_Ident                 "        "       (N/A)              "
```

```
            »       "  P
 9557  9566 Perf_Background_Dpkg.Altholdmode                                                      False          (N/A)
            »    FALSE  P
 9558  9567 Perf_Background_Dpkg.Psstpclbact                                                      False          (N/A)
            »    FALSE  P
 9559  9568 Perf_Background_Dpkg.Psstpdesact                                                      False          (N/A)
            »    FALSE  P
 9560  9569 Perf_Background_Dpkg.Psgrndotdes                                                      False          (N/A)
            »    FALSE  P
 9561  9570 
 9562  9571 
 9563  9572 ====> All 58 Comparisons Passed <====
 9564  9573 
 9565  9574 
 9566  9575 TESTID: 85
 9567  9576 
 9568  9577 if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
 9569  9578 Approach, then the Optimum Descent speeds shall be set as follows:
 9570  9579 if the following are true:
 9571  9580   - VG Partially-Limited CAS is non-zero, and Any of the following are true:
 9572  9581     - The A/C is currently in a deceleration, and either:
 9573  9582       - The predictions count is less than or equal to one, or
 9574  9583       - The current working flight plan is Active and the difference between the current prediction sequence
 9575  9584       counter and starting prediction sequence counter is less than or equal to 2, or
 9576  9585       - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
 9577  9586       being processed is Current Mode predictions(Normal or High Priority) ,or
 9578  9587       - First Preds After Insert Temporary indication is True;
 9579  9588     - The A/C is not in Auto Lateral mode,
 9580  9589     - Approach Speeds have been latched.
 9581  9590 then,
 9582  9591   Optimum Descent CAS is set to the VG Partially-Limited CAS
 9583  9592 otherwise,
 9584  9593   Optimum Descent CAS is set to current VG CAS target.
 9585  9594 -- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
 9586  9595 -- VG Partially-Limited CAS is non-zero.
 9587  9596 -- The A/C is currently in a deceleration and current working flight plan is Active and First Tactical Preds indicatio
            » n
 9588  9597 -- is True and the itinerary being processed is Current Mode predictions(Normal)
 9589  9598 -- Optimum Descent CAS is set to the VG Partially-Limited CAS
 9590  9599 
 9591  9600     REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT
 9592  9601 
 9593  9602     SUPPORTING REQUIREMENTS : N/A
 9594  9603 
 9595   9604 
 9596   9605 INPUT                                                                                                       VALUE
 9597   9606 -------------------------------------------------------------------------------------------  ------------------
             » --------
 9598   9607 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
             »      0.0
 9599   9608 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
             »  Descent
 9600   9609 Perf_Background_Dpkg.Pcfltphase
             »  Descent
 9601   9610 Perf_Background_Dpkg.Pcactorsec
             »   Active
 9602   9611 Guid_Spds_Dpkg.Vc3prtlimcas
             »      5.0
 9603   9612 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
             »     True
 9604   9613 Perf_Background_Dpkg.Psautolat
             »     True
 9605   9614 Guid_Ext_Dpkg.Gcxxlatautoc
             »     True
 9606   9615 Perf_Background_Dpkg.Psappspdlat
             »    False
 9607   9616 Perf_Background_Dpkg.Pcpredcount(Active)
             »        3
 9608   9617 Perf_Dpkg.Psfrstactprd
             »     True
 9609   9618 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
             »    False
 9610   9619 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
 9611   9620 Perf_Background_Dpkg.Pcitin.Itinerary                                                              Current_Mo
             » de_Preds
 9612   9621 
 9613   9622 
 9614   9623 OUTPUT                                                            EXPECTED               TOLERANCE             ACTUAL
             »           P/F
 9615   9624 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
 9616   9625 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                    5.0          0.001                5.0
             » 0000E+00  P
 9617   9626 
 9618   9627 
 9619   9628 ====> All 1 Comparisons Passed <====
 9620   9629 
```

```

TESTID: 86

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and current working flight plan is Active and First Tactical Preds indicatio
» n
-- is True and the itinerary being processed is Current Mode predictions(High Priority)
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
```

```
»      5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»     True
Perf_Background_Dpkg.Psautolat
»     True
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Psappspdlat
»    False
Perf_Background_Dpkg.Pcpredcount(Active)
»        3
Perf_Dpkg.Psfrstactprd
»     True
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»    False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
»    345.0
Perf_Background_Dpkg.Pcitin.Itinerary                                                                      Current_Mod
» e_Hi_Pri


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                       5.0          0.001                 5.0
» 0000E+00  P


====> All 1 Comparisons Passed <====


TESTID: 87

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is not currently in a deceleration and First Preds After Insert Temporary indication is True.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
»      5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»    False
Perf_Background_Dpkg.Psautolat
»     True
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Psappspdlat
»    False
Perf_Background_Dpkg.Pcpredcount(Active)
»        3
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»     True
```

```
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
»    345.0


OUTPUT                                                                                    EXPECTED                   TOLERANCE                 ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  -----------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                                                345.0          0.001                  3.4
» 5000E+02  P


====> All 1 Comparisons Passed <====


TESTID: 88

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and predictions count is less than one.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


```

```
INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
»      5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»     True
Perf_Background_Dpkg.Psautolat
»     True
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Psappspdlat
»    False
Perf_Background_Dpkg.Pcpredcount(Active)
»        0
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»    False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
»    345.0


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                       5.0          0.001                 5.0
» 0000E+00  P


====> All 1 Comparisons Passed <====


TESTID: 89

```

```
if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and predictions count is greater than one.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
»      5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»     True
Perf_Background_Dpkg.Psautolat
»     True
```

```
9824  9833 Guid_Ext_Dpkg.Gcxxlatautoc
           »     True
9825  9834 Perf_Background_Dpkg.Psappspdlat
           »    False
9826  9835 Perf_Background_Dpkg.Pcpredcount(Active)
           »        3
9827  9836 Perf_Dpkg.Psfrstactprd
           »    False
9828  9837 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
           »    False
9829  9838 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
           »    345.0
9830  9839
9831  9840
9832  9841 OUTPUT                                                           EXPECTED              TOLERANCE             ACTUAL
           »           P/F
9833  9842 ----------------------------------------------------  -----------------------------  -------------  -----------------
           » --------  ----
9834  9843 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                    345.0          0.001                3.4
           » 5000E+02  P
9835  9844
9836  9845
9837  9846 ====> All 1 Comparisons Passed <====
9838  9847
9839  9848
9840  9849 TESTID: 90
9841  9850
9842  9851 if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
9843  9852 Approach, then the Optimum Descent speeds shall be set as follows:
9844  9853 if the following are true:
9845  9854   - VG Partially-Limited CAS is non-zero, and Any of the following are true:
9846  9855     - The A/C is currently in a deceleration, and either:
9847  9856       - The predictions count is less than or equal to one, or
9848  9857       - The current working flight plan is Active and the difference between the current prediction sequence
9849  9858       counter and starting prediction sequence counter is less than or equal to 2, or
9850  9859       - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
9851  9860       being processed is Current Mode predictions(Normal or High Priority) ,or
9852  9861       - First Preds After Insert Temporary indication is True;
9853  9862     - The A/C is not in Auto Lateral mode,
9854  9863     - Approach Speeds have been latched.
9855  9864 then,
9856  9865   Optimum Descent CAS is set to the VG Partially-Limited CAS
9857  9866 otherwise,
9858  9867   Optimum Descent CAS is set to current VG CAS target.
```

```
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and The current working flight plan is Temporary and the difference
-- between the current prediction sequence counter and starting prediction sequence counter is equal to 2.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec                                                                                      T
» emporary
Guid_Spds_Dpkg.Vc3prtlimcas
»      5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»     True
Perf_Background_Dpkg.Psautolat
»     True
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Psappspdlat
»    False
Perf_Background_Dpkg.Pcpredcount(Temporary)
»        3
Perf_Background_Dpkg.Active_Start_Predcount
»        1
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»    False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
»    345.0


```

```
OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                     345.0          0.001                 3.4
» 5000E+02  P


====> All 1 Comparisons Passed <====


TESTID: 91

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and The current working flight plan is Active and the difference
-- between the current prediction sequence counter and starting prediction sequence counter is less than 2.
-- Optimum Descent CAS is set to the VG Partially-Limited CAS

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
```

```
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
»      5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»     True
Perf_Background_Dpkg.Psautolat
»     True
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Psappspdlat
»    False
Perf_Background_Dpkg.Pcpredcount(Active)
»        3
Perf_Background_Dpkg.Active_Start_Predcount
»        2
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»    False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
»    345.0


OUTPUT                                                     EXPECTED               TOLERANCE             ACTUAL
»           P/F
----------------------------------------------------  ----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                      5.0          0.001                5.0
» 0000E+00  P


====> All 1 Comparisons Passed <====


TESTID: 92

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
```

```
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and The current working flight plan is Active and the difference
-- between the current prediction sequence counter and starting prediction sequence counter is greater than 2.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                      VALUE
---------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
»      5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»     True
Perf_Background_Dpkg.Psautolat
»     True
```

```
Guid_Ext_Dpkg.Gcxxlatautoc
»     True
Perf_Background_Dpkg.Psappspdlat
»    False
Perf_Background_Dpkg.Pcpredcount(Active)
»        3
Perf_Background_Dpkg.Active_Start_Predcount
»        0
Perf_Dpkg.Psfrstactprd
»    False
Perf_Dpkg.Insrt_Tmpy_Frst_Preds
»    False
Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
»    345.0


OUTPUT                                                          EXPECTED              TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                     345.0          0.001                 3.4
» 5000E+02  P


====> All 1 Comparisons Passed <====


TESTID: 93

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
```

```
10025 10034 otherwise,
10026 10035   Optimum Descent CAS is set to current VG CAS target.
10027 10036 -- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
10028 10037 -- VG Partially-Limited CAS is non-zero.
10029 10038 -- The A/C is currently in a deceleration and current working flight plan is Temporary and First Tactical Preds
10030 10039 -- indication is True and the itinerary being processed is Current Mode predictions(Normal)
10031 10040 -- Optimum Descent CAS is set to current VG CAS target.
10032 10041
10033 10042     REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT
10034 10043
10035 10044     SUPPORTING REQUIREMENTS : N/A
10036 10045
10037 10046
10038 10047 INPUT                                                                                                         VALUE
10039 10048 -----------------------------------------------------------------------------------------------------------  ------------------
            » --------
10040 10049 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
            »      0.0
10041 10050 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
            »  Descent
10042 10051 Perf_Background_Dpkg.Pcfltphase
            »  Descent
10043 10052 Perf_Background_Dpkg.Pcactorsec                                                                                     T
            » emporary
10044 10053 Guid_Spds_Dpkg.Vc3prtlimcas
            »      5.0
10045 10054 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
            »     True
10046 10055 Perf_Background_Dpkg.Psautolat
            »     True
10047 10056 Guid_Ext_Dpkg.Gcxxlatautoc
            »     True
10048 10057 Perf_Background_Dpkg.Psappspdlat
            »    False
10049 10058 Perf_Background_Dpkg.Pcpredcount(Temporary)
            »        3
10050 10059 Perf_Dpkg.Psfrstactprd
            »     True
10051 10060 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
            »    False
10052 10061 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
            »    345.0
10053 10062 Perf_Background_Dpkg.Pcitin.Itinerary                                                                     Current_Mo
            » de_Preds
```

```


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                     345.0          0.001                   3.4
» 5000E+02  P


====> All 1 Comparisons Passed <====


TESTID: 94

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and current working flight plan is Active and First Tactical Preds
-- indication is False and the itinerary being processed is Current Mode predictions(Normal)
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
```

```
 10095  10104 -------------------------------------------------------------------------------------------------  ------------------
              » --------
 10096  10105 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
              »      0.0
 10097  10106 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
              »  Descent
 10098  10107 Perf_Background_Dpkg.Pcfltphase
              »  Descent
 10099  10108 Perf_Background_Dpkg.Pcactorsec
              »   Active
 10100  10109 Guid_Spds_Dpkg.Vc3prtlimcas
              »      5.0
 10101  10110 Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
              »     True
 10102  10111 Perf_Background_Dpkg.Psautolat
              »     True
 10103  10112 Guid_Ext_Dpkg.Gcxxlatautoc
              »     True
 10104  10113 Perf_Background_Dpkg.Psappspdlat
              »    False
 10105  10114 Perf_Background_Dpkg.Pcpredcount(Active)
              »        3
 10106  10115 Perf_Dpkg.Psfrstactprd
              »    False
 10107  10116 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
              »    False
 10108  10117 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
              »    345.0
 10109  10118 Perf_Background_Dpkg.Pcitin.Itinerary                                                                Current_Mo
              » de_Preds
 10110  10119
 10111  10120
 10112  10121 OUTPUT                                                        EXPECTED              TOLERANCE              ACTUAL
              »           P/F
 10113  10122 ---------------------------------------------------  ----------------------------  -------------  ------------------
              » --------  ----
 10114  10123 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                  345.0          0.001                 3.4
              » 5000E+02  P
 10115  10124
 10116  10125
 10117  10126 ====> All 1 Comparisons Passed <====
 10118  10127
 10119  10128
 10120  10129 TESTID: 95
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

```

if the current VG CAS and Mach targets are valid, and the flight phase is Descent or
Approach, then the Optimum Descent speeds shall be set as follows:
if the following are true:
  - VG Partially-Limited CAS is non-zero, and Any of the following are true:
    - The A/C is currently in a deceleration, and either:
      - The predictions count is less than or equal to one, or
      - The current working flight plan is Active and the difference between the current prediction sequence
      counter and starting prediction sequence counter is less than or equal to 2, or
      - The current working flight plan is Active and First Tactical Preds indication is True and the itinerary
      being processed is Current Mode predictions(Normal or High Priority) ,or
      - First Preds After Insert Temporary indication is True;
    - The A/C is not in Auto Lateral mode,
    - Approach Speeds have been latched.
then,
  Optimum Descent CAS is set to the VG Partially-Limited CAS
otherwise,
  Optimum Descent CAS is set to current VG CAS target.
-- In this case, flight phase is Descent and current VG CAS and Mach targets are valid.
-- VG Partially-Limited CAS is non-zero.
-- The A/C is currently in a deceleration and First Preds After Insert Temporary indication is False.
-- Optimum Descent CAS is set to current VG CAS target.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_2249_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Pcoptinitspd.Des.Cas
»      0.0
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent
Perf_Background_Dpkg.Pcfltphase
»  Descent
Perf_Background_Dpkg.Pcactorsec
»   Active
Guid_Spds_Dpkg.Vc3prtlimcas
»      5.0
Guid_Checkpoint_Resynch_Dpkg.Vc3spdchgtgt.Apply
»     True
Perf_Background_Dpkg.Psautolat
```

```
             »     True
10158  10167 Guid_Ext_Dpkg.Gcxxlatautoc
             »     True
10159  10168 Perf_Background_Dpkg.Psappspdlat
             »    False
10160  10169 Perf_Background_Dpkg.Pcpredcount(Active)
             »        3
10161  10170 Perf_Dpkg.Psfrstactprd
             »    False
10162  10171 Perf_Dpkg.Insrt_Tmpy_Frst_Preds
             »    False
10163  10172 Guid_Spds_Dpkg.Vc3Curspds.Cas.Data
             »    345.0
10164  10173
10165  10174
10166  10175 OUTPUT                                                         EXPECTED                 TOLERANCE              ACTUAL
             »           P/F
10167  10176 ----------------------------------------------------  -----------------------------  -------------  ------------------
             » --------  ----
10168  10177 Perf_Background_Dpkg.Pcoptinitspd.Des.Cas                                    345.0          0.001                   3.4
             » 5000E+02  P
10169  10178
10170  10179
10171  10180 ====> All 1 Comparisons Passed <====
10172  10181
10173  10182
10174        ~~Test End Time: Oct 15 13:23:54 2013~~
       10183 TESTID: 96
       10184
       10185 The flag indicating Vertical Guidance is onpath or capturing Descent Path(Perf_Background_Dpkg.Psvgonpath) shall be se
             » t to true,
       10186 if all of the following conditions are satisfied:
       10187   - Level change auto control mode is engaged.
       10188   - The descent path reference is set to Onpath.
       10189   - The current working flight plan is Active.
       10190 -- In this case,
       10191 -- Level change auto control mode is engaged.
       10192 -- The descent path reference is set to Onpath.
       10193 -- The current working flight plan is Active.
       10194
       10195     REQUIREMENTS UNDER EVALUATION : PERF_SDD_09201_INT
       10196
       10197     SUPPORTING REQUIREMENTS : N/A
       10198
```

```

INPUT                                                                                                                              VALUE
-------------------------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                                  I
» s_Active
Guid_Ext_Dpkg.Va3lcautoctl
»     True
Perf_Background_Dpkg.Pcpathref
»   Onpath
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.Psvgonpath
»    False
Guid_Ext_Dpkg.Va3pathref
»   Onpath
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent


OUTPUT                                                           EXPECTED                 TOLERANCE                ACTUAL
»           P/F
-----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Psvgonpath                                                 True          (N/A)
»     TRUE  P


====> All 1 Comparisons Passed <====


TESTID: 97

The flag indicating Vertical Guidance is onpath or capturing Descent Path(Perf_Background_Dpkg.Psvgonpath) shall be se
» t to true,
if all of the following conditions are satisfied:
  - Level change auto control mode is engaged.
  - The descent path reference is set to Onpath.
  - The current working flight plan is Active.
-- In this case,
-- Level change auto control mode is not engaged.
-- The descent path reference is set to Onpath.
-- The current working flight plan is Active.

```

```
    REQUIREMENTS UNDER EVALUATION : PERF_SDD_09201_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
Guid_Ext_Dpkg.Va3lcautoctl
»    False
Perf_Background_Dpkg.Pcpathref
»   Onpath
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.Psvgonpath
»     True
Guid_Ext_Dpkg.Va3pathref
»   Onpath
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»  Descent


OUTPUT                                                          EXPECTED               TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Psvgonpath                                               False          (N/A)
»    FALSE  P


====> All 1 Comparisons Passed <====


TESTID: 98

The flag indicating Vertical Guidance is onpath or capturing Descent Path(Perf_Background_Dpkg.Psvgonpath) shall be se
» t to true,
if all of the following conditions are satisfied:
  - Level change auto control mode is engaged.
  - The descent path reference is set to Onpath.
  - The current working flight plan is Active.
-- In this case,
-- Level change auto control mode is engaged.
-- The descent path reference is set to Nopath.
-- The current working flight plan is Active.

    REQUIREMENTS UNDER EVALUATION : PERF_SDD_09201_INT

    SUPPORTING REQUIREMENTS : N/A


INPUT                                                                                                          VALUE
--------------------------------------------------------------------------------------------------  ------------------
» --------
Perf_Background_Dpkg.Flight_Plan_Type                                                                                I
» s_Active
Guid_Ext_Dpkg.Va3lcautoctl
»     True
Perf_Background_Dpkg.Pcpathref
»   Nopath
Perf_Background_Dpkg.Pcactorsec
»   Active
Perf_Background_Dpkg.Psvgonpath
»     True
CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
»   Cruise


OUTPUT                                                          EXPECTED                TOLERANCE              ACTUAL
»           P/F
----------------------------------------------------  -----------------------------  -------------  ------------------
» --------  ----
Perf_Background_Dpkg.Psvgonpath                                               False         (N/A)
»    FALSE  P


====> All 1 Comparisons Passed <====


TESTID: 99

The flag indicating Vertical Guidance is onpath or capturing Descent Path(Perf_Background_Dpkg.Psvgonpath) shall be se
» t to true,
if all of the following conditions are satisfied:
  - Level change auto control mode is engaged.
  - The descent path reference is set to Onpath.
```

```
        10296   - The current working flight plan is Active.
        10297 -- In this case,
        10298 -- Level change auto control mode is engaged.
        10299 -- The descent path reference is set to Onpath.
        10300 -- The current working flight plan is Secondary.
        10301
        10302     REQUIREMENTS UNDER EVALUATION : PERF_SDD_09201_INT
        10303
        10304     SUPPORTING REQUIREMENTS : N/A
        10305
        10306
        10307 INPUT                                                                                                           VALUE
        10308 --------------------------------------------------------------------------------------------------  ------------------
              » --------
        10309 Perf_Background_Dpkg.Flight_Plan_Type                                                                                 I
              » s_Active
        10310 Guid_Ext_Dpkg.Va3lcautoctl
              »     True
        10311 Perf_Background_Dpkg.Pcpathref
              »   Onpath
        10312 Perf_Background_Dpkg.Pcactorsec                                                                                       S
              » econdary
        10313 Perf_Background_Dpkg.Psvgonpath
              »     True
        10314 Guid_Ext_Dpkg.Va3pathref
              »   Onpath
        10315 CTP_A350_PERF_BKGND_Get_Bk_Data.sync_flight_phase
              »  Descent
        10316
        10317
        10318 OUTPUT                                                          EXPECTED                       TOLERANCE                ACTUAL
              »           P/F
        10319 ----------------------------------------------------  -----------------------------  -------------  ------------------
              » --------  ----
        10320 Perf_Background_Dpkg.Psvgonpath                                               False          (N/A)
              »    FALSE  P
        10321
        10322
        10323 ====> All 1 Comparisons Passed <====
        10324
        10325
        10326 Test End Time: Dec 26 16:26:38 2013
 10175  10327 Test Generation System (TGS) Version v4.5.2, ps4082887-103
 10176  10328 Current Program Library
```

File: CTP_A350_PERF_BKGND_GET_BK_DATA.rst (continued)

10177		~~c:\a350\builds\a01365\bld_a01365\common_software\v009\hads_root\a29_cert_system.alb (root)~~
10178		~~c:\a350\builds\a01365\bld_a01365\common_software\v009\acm$ada_lib.alb~~
10179		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\Iotbx.alb~~
10180		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\Tou.alb~~
10181		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\Ops.alb~~
10182		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\Bsvc.alb~~
10183		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\Opc.alb~~
10184		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\Io.alb~~
10185		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\isb.alb~~
10186		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\Com.alb~~
10187		~~C:\A350\Builds\A01365\BLD_A01365\Libraries\Fm.alb~~
10188		~~C:\A350\BUILDS\A01365\BLD_A01365\Libraries\fm2.alb~~
10189		~~C:\A350_Work\20130716\CTP_A350_PERF_BKGND_GET_BK_DATA(Rework)\fm2_p.alb~~
10190		~~C:\A350_Work\20130716\CTP_A350_PERF_BKGND_GET_BK_DATA(Rework)\my_fm2.alb~~
	10329	c:\a350\builds\a01418\bld_a01418\common_software\v009\hads_root\a29_cert_system.alb (root)
	10330	c:\a350\builds\a01418\bld_a01418\common_software\v009\acm$ada_lib.alb
	10331	C:\A350\Builds\A01418\BLD_A01418\Libraries\Iotbx.alb
	10332	C:\A350\Builds\A01418\BLD_A01418\Libraries\Tou.alb
	10333	C:\A350\Builds\A01418\BLD_A01418\Libraries\Ops.alb
	10334	C:\A350\Builds\A01418\BLD_A01418\Libraries\Bsvc.alb
	10335	C:\A350\Builds\A01418\BLD_A01418\Libraries\Opc.alb
	10336	C:\A350\Builds\A01418\BLD_A01418\Libraries\Io.alb
	10337	C:\A350\Builds\A01418\BLD_A01418\Libraries\isb.alb
	10338	C:\A350\Builds\A01418\BLD_A01418\Libraries\Com.alb
	10339	C:\A350\Builds\A01418\BLD_A01418\Libraries\Fm.alb
	10340	C:\A350\BUILDS\A01418\BLD_A01418\Libraries\fm2.alb
	10341	C:\A350_Work\S4P51418\CTP_A350_PERF_BKGND_GET_BK_DATA\fm2_p.alb
	10342	C:\A350_Work\S4P51418\CTP_A350_PERF_BKGND_GET_BK_DATA\my_fm2.alb

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_BK_DATA.dsp

```
##********************************************************************************************************************
» **
##    DSP Generator Tool Version 1.0
##********************************************************************************************************************
» **
##
##    CTP_A350_PERF_BKGND_GET_BK_DATA.DSP
##
## NOTE:
## A. "Any" SCR that is mentioned in this DSP file must contain the prefix "SCR_disposed#: "
## B. Template of this DSP file is created by tool and it should not be modified/deleted.
## C. If any information is not applicable then mark the corresponding field as N/A instead of deleting it.
## D. If more than one SCR has to be used for one issue, make separate entry. SCRs should not be captured
##    in the same line using comma or any other separators.
##
##

----------------------------------------------------------------------------------------------------------------------
» --
1. REASON_FOR_FAILURES_OF_TEST_CASE(S):
## The below mentioned group of lines need to be repeated for each Test case ID, which is having test failures in it.
----------------------------------------------------------------------------------------------------------------------
» --

Test_case_Id: N/A
#_of_Failures: N/A
Failed_Requirements: N/A
SCR_disposed#: N/A
SCR_PROJECT: N/A
SCR_SUB_PROJECT: N/A
Disposition: N/A

----------------------------------------------------------------------------------------------------------------------
» --
2. COVERAGE_PROBLEM(S):
## Standard excuse and SCR related details need to be mentioned for each and every sub unit separately.
----------------------------------------------------------------------------------------------------------------------
» --
Compilation_Unit_Name: PRF_BKGND_PKG.GET_BK_DATA
Uncovered_Code:


 37   37 TCH(Test_Coverage_Hole)_Excuse: N/A
 38      ~~N/A~~
 39   38 SCR_disposed#: N/A
 40   39 SCR_PROJECT: N/A
 41   40 SCR_SUB_PROJECT: N/A
 42   41
 43   42 ------------------------------------------------------------------------------------------------------------------
         » --
 44   43 3. ANY_OTHER_ISSUE(S):
 45   44 ## A. Every entry in Any_Other_Issue should be followed by a SCR_number, its corresponding CM 21 project and subprojec
         » t.
 46   45 ## B. If SCR is not applicable then mention N/A.
 47   46 ## C. If more than one SCR has to be used for one issue, make separate entry. SCRs should not be captured
 48   47 ##    in the same line using comma or any other separators.
 49   48 ------------------------------------------------------------------------------------------------------------------
         » --
 50   49
 51   50 (1) PERF_SRD_12507_DR is partially tested here,aslo is tested in CTP_A350_PERF_INTEG_CLB_TGT& CTP_A350_PERF_INT_SHELL_
         » SETUP_INTVAL
 52   51 SCR_disposed#: N/A
 53   52 SCR_PROJECT: N/A
 54   53 SCR_SUB_PROJECT: N/A
 55   54
 56   55 (2) PERF_SRD_12511_DR is partially tested here,aslo is tested in
 57   56 CTP_A350_PERF_INTEG_CLB_ACCEL & CTP_A350_PERF_INT_SHELL_SETUP_INTVAL
 58   57 SCR_disposed#: N/A
 59   58 SCR_PROJECT: N/A
 60   59 SCR_SUB_PROJECT: N/A
 61   60
 62   61 (3) PERF_SRD_12514_DR is partially tested here,aslo is tested in
 63   62 CTP_A350_PERF_INTEG_CLB_ACCEL & CTP_A350_PERF_INT_SHELL_SETUP_INTVAL
 64   63 SCR_disposed#: N/A
 65   64 SCR_PROJECT: N/A
 66   65 SCR_SUB_PROJECT: N/A
 67   66
 68   67 {4) PERF_SRD_12517_DR is partially tested here,aslo is tested in
 69   68 CTP_A350_PERF_INTEG_INT_VMIN_CLB & CTP_A350_PERF_INT_SHELL_SETUP_INTVAL
 70   69 SCR_disposed#: N/A
 71   70 SCR_PROJECT: N/A
 72   71 SCR_SUB_PROJECT: N/A
 73   72
 74   73 (5) PERF_SRD_12520_DR is partially tested here,aslo is tested in
 75   74 CTP_A350_PERF_AEROENG_PKG_03, CTP_A350_PERF_INTEG_CLB_DES_FPA& CTP_A350_PERF_INT_SHELL_SETUP_INTVAL
 76   75 SCR_disposed#: N/A
 77   76 SCR_PROJECT: N/A
 78   77 SCR_SUB_PROJECT: N/A
 79   78
 80   79 (6) PERF_SRD_12523_DR is partially tested here   ,aslo is tested in
 81   80 CTP_A350_PERF_INTEG_CLB_DESVS, CTP_A350_PERF_INTEG_CLB_DES_FPA & CTP_A350_PERF_INT_SHELL_SETUP_INTVAL
 82   81 SCR_disposed#: N/A
 83   82 SCR_PROJECT: N/A
 84   83 SCR_SUB_PROJECT: N/A
 85   84
 86   85 (7) PERF_SRD_10199_INT is partially tested here,aslo is tested in
 87   86 CTP_A350_PERF_AEROENG_PKG_01, CTP_A350_PERF_SPEED_PKG_03, CTP_A350_PERF_INTEG_FORWARD_DES,
 88   87 CTP_A350_PERF_INT_SHELL_SETUP_PRED, CTP_A350_PERF_FPLN_GET_START_STATE& CTP_A350_PERF_ALTPLAN_EXECUTE
 89   88 SCR_disposed#: N/A
 90   89 SCR_PROJECT: N/A
 91   90 SCR_SUB_PROJECT: N/A
 92   91
 93   92 (8) PERF_SRD_1490_INT is partially tested here,aslo is tested in
 94   93 CTP_A350_PERF_FPLN_CONTROL_INTEG, CTP_A350_PERF_FPLN_PROCESS_GUIDTERM &CTP_A350_PERF_FPLN_PROCESS_ITINTERM
 95   94 SCR_disposed#: N/A
 96   95 SCR_PROJECT: N/A
 97   96 SCR_SUB_PROJECT: N/A
 98   97
 99   98 (9) PERF_SRD_12370_INT is partially tested here,aslo is tested in
100   99 CTP_A350_PERF_BKGND_GET_KY_DATA & CTP_A350_PERF_CHGPROC_INITIALIZE
101  100 SCR_disposed#: N/A
102  101 SCR_PROJECT: N/A
103  102 SCR_SUB_PROJECT: N/A
104  103
105  104 (10) PERF_SRD_12404 is partially tested here,aslo is tested in
106  105 CTP_A350_PERF_BKGND_GET_KY_DATA, CTP_A350_PERF_BKGND_PUT_BK_DATA,
107  106 CTP_A350_PERF_REALTIME_GET_DATA & CTP_A350_PERF_REALTIME_PUT_DATA
108  107 SCR_disposed#: N/A
109  108 SCR_PROJECT: N/A
110  109 SCR_SUB_PROJECT: N/A
111  110
112  111 (11) PERF_SRD_10166_INT is partially tested here,aslo is tested in
113  112 CTP_A350_PERF_ALTPLAN_GET_DATA, CTP_A350_PERF_BKGND_GET_KY_DATA
114  113 SCR_disposed#: N/A
115  114 SCR_PROJECT: N/A
116  115 SCR_SUB_PROJECT: N/A
117  116
118  117 (12) The requirements mentioned in the SRD anchor, PERF_SRD_12529_INT is explicitly implemented in VGUIDE discrete rat
         » her than in
119  118 Perf. Comment section of SDD anchor, Perf_SDD_4600 to which PERF_SRD_12529_INT traces can be referred for the Same.
```

```
 120   119 Here PERF_SRD_12529_INT is simply tagged but not tested to avoid trace hole.
 121   120 SCR_disposed#: N/A
 122   121 SCR_PROJECT: N/A
 123   122 SCR_SUB_PROJECT: N/A
 124   123
 125   124 (13) As per anchor PERF_SDD_3746_INT, The current Step altitude is initialized to the current Cruise altitude after
 126   125 copying the trip data. This is common to all Test Cases.
 127   126 SCR_disposed#: N/A
 128   127 SCR_PROJECT: N/A
 129   128 SCR_SUB_PROJECT: N/A
 130   129
 131   130 ----------------------------------------------------------------------------------------------------------------------
           » --
 132   131 4. SPECIAL_EXECUTION_INSTRUCTION(S):
 133   132 ## Capture all additional information and/or supporting file(s) required for this CTP execution.
 134   133 ## For example:
 135   134 ## (i) "nav_db23.o" is required for execution.
 136   135 ## (ii) "apex_traps.o"/gen=xx and "common file"/gen=xx are required for execution.
 137   136 ## Database_Details:
 138   137 ## 1. <Enter the database name>
 139   138 ----------------------------------------------------------------------------------------------------------------------
           » --
 140   139
 141   140 (i) "apex_traps.o"/gen=1 and "CTP_A350_PERF_COMMON_OBJECTS.C"/gen=3 are required for execution.
 142   141
 143   142 Database_Details:
 144   143 1. N/A
 145   144
 146   145 ****************************************************** End of Report *************************************************
           » **
```

Mode: All Lines

File: CTP_A350_PERF_ADS_INTERFACE.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_ADS_INTERFACE.STB
--
--    REASONS FOR STUBBING : PROCEDURE  Get_Requested_Num_Waypoints stubbed out to simplify testing.
--
--    Source File Name: PERF_ADS_INTERFACE_DPKG.ADA
--
with Apex_Partition_Pkg;            -- common sw lib
with Apex_Types_Pkg;                -- common sw lib
with Portable_Types_Pkg;            -- common sw lib
with Sorts;                         -- common sw lib
with Perf_Ads_Intent_Request_Tpkg;  -- fms common type
with Flight_Pln_Hdr_Types;          -- fms common type
with Flight_Pln_Leg_Types;          -- fms common type
with Lateral_Path_Type_Tpkg;        -- fms common type
with Fmcs_Fp_Guid_Btypes;           -- fms common type
with Fmcs_Partition_Data_Pkg;       -- fms common type
with Fmcs_Partition_Data_Pkg;       -- fms common object
with Atc_Discretes_Pkg;             -- fms aircraft object
with Options_And_Data_Pkg;          -- fms common util
with Common_Lgb;                    -- fms common fmf util
with Sys_Change_Flags_Pkg;
with Perf_Change_Flags_Types;
with Number_To_Text_Pkg;
with Text_Format_Tpkg;
with Atc_Msg_Common_Types_Pkg;
with Fmf_Fpi_Atc_Common_Util_Pkg;
with Fmcs_Fp_Guid_Btypes;
with Math_pkg;
with Ctp_A350_Perf_Bkgnd_Get_Bk_Data;
-- Procedures to use to obtain operator visibility
use Apex_Partition_Pkg;
use Apex_Types_Pkg;
use Lateral_Path_Type_Tpkg;         -- for = sign
use Portable_Types_Pkg;             -- for + sign
use Atc_Msg_Common_Types_Pkg;
use Fmcs_Fp_Guid_Btypes;


package body Perf_Ads_Interface_Dpkg is
```

```
-- Static Data
--

  Fixed_Intent_Data : Fixed_Intent_Data_Type;                -- Storage for Fixed Intent Data Buffer
  Intermediate_Intent_Data : Intermediate_Intent_Data_Type;  -- Storage for Intermediate Intent Data Buffer
  Predicted_Route_Data : Predicted_Route_Data_Type;          -- Storage for Predicted Route Data Buffer
  Fpln_Event_Status : Fpln_Event_Rec_Type;                   -- Reason why Fpln_Modified bit is set (Pred Rte)

  -- frame data lock-preemption tokens to be accessed only by Access_Granted & Access_Released subprograms.
  -- exception: IO "Get" routines are allowed to direct access since they are called out of foreground
  --            and thus will never be preempted by Perf or Dl subprograms.
  Frame_Data_In_Use : array (Lock_Data_Frame_Type) of Boolean;

  -- Initialization aggregate for GMT
  Gmt_Init : Fcs_Date_Time_Pkg.Time_Rec := (Hour => 0,
                                            Minute => 0,
                                            Second => 0,
                                            Millisecond => 0,
                                            Rtc_Status_Register => (Unused => 0,
                                                                    Leap_Year => Apex_Partition_Pkg.Current_Year,
                                                                    Time_Valid => False,
                                                                    others=>False),
                                            Gpc_Time => 0,
                                            Delta_Time => 0);

-- overload operators

  function "=" (Left, Right : in Portable_Types_Pkg.Integer_32) return Boolean renames Portable_Types_Pkg."=";

  function "+" (Left, Right : in Portable_Types_Pkg.Integer_32) return Portable_Types_Pkg.Integer_32 renames Portable_
» Types_Pkg."+";

  function "-" (Left, Right : in Portable_Types_Pkg.Integer_32) return Portable_Types_Pkg.Integer_32 renames Portable_
» Types_Pkg."-";

  function "<" (Left, Right : in Portable_Types_Pkg.Integer_32) return Boolean renames Portable_Types_Pkg."<";

  function ">" (Left, Right : in Portable_Types_Pkg.Integer_32) return Boolean renames Portable_Types_Pkg.">";

  function ">=" (Left, Right : in Portable_Types_Pkg.Integer_32) return Boolean renames Portable_Types_Pkg.">=";



----------------------------------------------------------------
```

```

function Buffer_Ttg_Greater_Than (This, Next : in Fixed_Intent_Rec_Type) return Boolean is


begin    --  function Perf_Ads_Interface_Dpkg.Buffer_Ttg_Greater_Than

  return (This.Requests.Ttg > Next.Requests.Ttg) and then (Next.Requests.Ttg /= 0);

end Buffer_Ttg_Greater_Than;


function Buffer_Ttg_Greater_Than_Or_Equal (This, Next : in Fixed_Intent_Rec_Type) return Boolean is


begin    --  function Perf_Ads_Interface_Dpkg.Buffer_Ttg_Greater_Than_Or_Equal

  return (This.Requests.Ttg >= Next.Requests.Ttg) and then (Next.Requests.Ttg /= 0);

end Buffer_Ttg_Greater_Than_Or_Equal;


package Buffer_Sort_Pkg is


   new Sorts (Element_Type => Fixed_Intent_Rec_Type,
              Index => Perf_Ads_Intent_Request_Tpkg.Request_Index_Type,
              Table_Type => Fixed_Intent_Storage_Type,
              Gt => Buffer_Ttg_Greater_Than,
              Gte => Buffer_Ttg_Greater_Than_Or_Equal);


function Access_Granted (Frame : in Lock_Data_Frame_Type) return Boolean is


  New_Lock_Level : Apex_Partition_Pkg.Lock_Level_Type;
  Status_Code : Apex_Types_Pkg.Status_Code_Type;
  Access_Received : Boolean;

begin

  --LOCK
  Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level => New_Lock_Level, Status_Code => Status_Code);
  if Status_Code = Apex_Types_Pkg.No_Error then
    if not Frame_Data_In_Use (Frame) then
```

```
        Frame_Data_In_Use (Frame) := True;
        Access_Received := True;
      else
        Access_Received := False;
      end if;

      --UNLOCK - if unlock completes with a status other than No_Error, the returned new_lock_level
      --  will be zero (i.e., process scheduling will resume).
      Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level => New_Lock_Level, Status_Code => Status_Code);

    else  -- lock request unsucessful
      Access_Received := False;
    end if;

    return Access_Received;

  end Access_Granted;


  procedure Access_Released (Frame : in Lock_Data_Frame_Type) is


    New_Lock_Level : Apex_Partition_Pkg.Lock_Level_Type;
    Status_Code : Apex_Types_Pkg.Status_Code_Type;

  begin
    --LOCK
    Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level => New_Lock_Level, Status_Code => Status_Code);

    Frame_Data_In_Use (Frame) := False;

    --UNLOCK
    Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level => New_Lock_Level, Status_Code => Status_Code);

  end Access_Released;


  procedure Initialize (Boot_Status : in Apex_Partition_Pkg.Operating_Mode_Type; --
                        Success : out Boolean) is


    Predicted_Frame_Success : Boolean := False;
    Intermediate_Frame_Success : Boolean := False;
    Fixed_Frame_Success : Boolean := False;
    Purge_Success : Boolean := False;

  begin    --  procedure Perf_Ads_Interface_Dpkg.Initialize

    if Boot_Status = Apex_Partition_Pkg.Normal then

      if Access_Granted (Predicted_Route) then

        --  Initialize all fields in the Predicted Route buffer;
        Predicted_Route_Data :=
           (Num_Of_Requested_Waypoints => 0,
            Num_Of_Predicted_Waypoints => 0,
            Preds_Reference_Gmt => Gmt_Init,
            Time_Stamp => (Time => (Hours => 0, Minutes => 0, Seconds => 0), Is_Valid => False, Clock_Source_Is_Gps =>
»  False),
            Preds_Recomputed_Timer => 0,
            Fpln_Modified => False,
            Destination_Waypoint_Included => False,
            Non_Predicted_Data_Is_Valid => False,
            Predicted_Data_Is_Valid => False,
            Data => (others => (Lat_Lon => (0.0, 0.0), Altitude => 0.0, Waypoint_Ttg => 0, Waypoint_Ident => (others =
» > ' '))));
        Access_Released (Predicted_Route);
        Predicted_Frame_Success := True;
      end if;


      if Access_Granted (Intermediate_Intent) then

        --  Initialize all fields in the Intermediate Intent buffer;
        Intermediate_Intent_Data :=
           (Num_Of_Predicted_Points => 0,
            Time_Stamp => (Time => (Hours => 0, Minutes => 0, Seconds => 0), Is_Valid => False, Clock_Source_Is_Gps =>
»  False),
            Preds_Recomputed_Timer => 0,
            Predicted_Data_Is_Valid => False,
            Data => (others => (Distance => 0.0, Track => 0.0, Altitude => 0.0, Ttg => 0)));
        Access_Released (Intermediate_Intent);
        Intermediate_Frame_Success := True;
      end if;


      -- no lock needed here since the purge will do it
      --  Initialize all fields in the Fixed Intent buffer;
      Purge_Fixed_Intent_Requests (Success => Fixed_Frame_Success);

      Success := Predicted_Frame_Success and then --
                    Intermediate_Frame_Success and then --
                    Fixed_Frame_Success;


    elsif Boot_Status = Apex_Partition_Pkg.Cold_Start then

      -- Since this package is resynch data, all values need to be explicitly re-initialized
      -- upon cold start (or else the retained values would be kept).
      -- No locking is needed since processes are not yet running in steady state.

      Frame_Data_In_Use (Predicted_Route) := False;
      Frame_Data_In_Use (Intermediate_Intent) := False;
      Frame_Data_In_Use (Fixed_Intent) := False;

      Purge_Fixed_Intent_Requests (Success => Purge_Success);

      Intermediate_Intent_Data :=
         (Num_Of_Predicted_Points => 0,
          Time_Stamp => (Time => (Hours => 0, Minutes => 0, Seconds => 0), Is_Valid => False, Clock_Source_Is_Gps => F
» alse),
          Preds_Recomputed_Timer => 0,
          Predicted_Data_Is_Valid => False,
          Data => (others => (Distance => 0.0, Track => 0.0, Altitude => 0.0, Ttg => 0)));

      Predicted_Route_Data :=
         (Num_Of_Requested_Waypoints => 0,
          Num_Of_Predicted_Waypoints => 0,
          Preds_Reference_Gmt => Gmt_Init,
          Time_Stamp => (Time => (Hours => 0, Minutes => 0, Seconds => 0), Is_Valid => False, Clock_Source_Is_Gps => F
» alse),
          Preds_Recomputed_Timer => 0,
          Fpln_Modified => False,
          Destination_Waypoint_Included => False,
          Non_Predicted_Data_Is_Valid => False,
          Predicted_Data_Is_Valid => False,
          Data => (others => (Lat_Lon => (0.0, 0.0), Altitude => 0.0, Waypoint_Ttg => 0, Waypoint_Ident => (others =>
» ' '))));

      Success := True;

    else
```

```

      -- set output parameters for case when an unexpected Boot_Status is passed in.
      Success := False;

    end if;

  end Initialize;


  procedure Find_Request_In_Buffer (Reference_Id : in Perf_Ads_Intent_Request_Tpkg.Reference_Id_Type; --
                                    Index : out Perf_Ads_Intent_Request_Tpkg.Request_Index_Type) is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Find_Request_In_Buffer

    Index := Perf_Ads_Intent_Request_Tpkg.Request_Index_Type'First;

    for Search_Index in 1 .. Fixed_Intent_Data.Num_Of_Requests loop

      Index := Search_Index;

      exit when (Fixed_Intent_Data.Data (Search_Index).Requests.Reference_Id = Reference_Id);

    end loop;

  end Find_Request_In_Buffer;


  procedure Add_Request (For_Id : in Perf_Ads_Intent_Request_Tpkg.Reference_Id_Type; --
                         At_Time : in Perf_Ads_Intent_Request_Tpkg.Time_To_Go_Type; --
                         Success : out Boolean) is



  begin    --  procedure Perf_Ads_Interface_Dpkg.Add_Request

    -- Attempt to gain access to the fixed intent requests.
    if Access_Granted (Fixed_Intent) then

      -- Store the added Ref ID and Requested TTG into the appropriate fields.  Zero/invalidate the other fields becau
» se
      --  we don't have any preds yet for this (Ref ID/TTG) pair.  It's important to do this zeroing because when Fixe
» d
      --  Intent preds ARE stored, if there's no matching (Ref ID/TTG) pair from preds, these fields in the Fixed Inte
```

```
» nt
      --  Buffer are left untouched.  Thus, we should put in zeroes now, at the beginning.
      Fixed_Intent_Data.Data (Fixed_Intent_Data.Num_Of_Requests + 1) := (Requests => (Reference_Id => For_Id, Ttg => A
» t_Time), --
                                                                         Predicted_Ttg => 0,
                                                                         Lat_Lon => (Lat => 0.0, Lon => 0.0),
                                                                         Altitude => 0.0,
                                                                         Is_Valid => False);

      Buffer_Sort_Pkg.Bubble_Sort (Table => Fixed_Intent_Data.Data);       -- Resort the Fixed Intent Buffer

      Fixed_Intent_Data.Num_Of_Requests := Fixed_Intent_Data.Num_Of_Requests + 1;   -- Increment the buffer's number
                                                                                    --  of requests

      --  Set the 'chadsttg' change set element to alert Perf to refresh the active flight plan predictions
      Sys_Change_Flags_Pkg.Set_Change_Flag (Perf_Change_Flags_Types.Chadsttg);

      -- If we have made it this far, set 'success' flag to 'true.'
      Success := True;

      -- Release access.
      Access_Released (Fixed_Intent);

    else
      -- We did not gain access to the fixed intent requests.
      Success := False;
    end if;  -- locked?

  end Add_Request;


  procedure Remove_Request (For_Id : in Perf_Ads_Intent_Request_Tpkg.Reference_Id_Type; --
                            Success : out Boolean) is



--  LOCAL VARIABLES
    Matching_Index : Perf_Ads_Intent_Request_Tpkg.Request_Index_Type;

  begin    --  procedure Perf_Ads_Interface_Dpkg.Remove_Request

    -- Attempt to gain access to the fixed intent requests.
    if Access_Granted (Fixed_Intent) then

```

```
      Find_Request_In_Buffer (Reference_Id => For_Id, Index => Matching_Index);     -- Locate the Ref ID within the buffer

      -- Remove this request by collapsing the Fixed Intent Buffer by 1
      Fixed_Intent_Data.Data (Matching_Index .. Fixed_Intent_Data.Num_Of_Requests - 1) :=
         Fixed_Intent_Data.Data (Matching_Index + 1 .. Fixed_Intent_Data.Num_Of_Requests);

      -- The Fixed Intent Buffer has been shortened by one request, so clear what "was" the end of the buffer
      Fixed_Intent_Data.Data (Fixed_Intent_Data.Num_Of_Requests) := (Requests => (Reference_Id => 0, Ttg => 0), --
                                                                     Predicted_Ttg => 0,
                                                                     Lat_Lon => (Lat => 0.0, Lon => 0.0),
                                                                     Altitude => 0.0,
                                                                     Is_Valid => False);

      Fixed_Intent_Data.Num_Of_Requests := Fixed_Intent_Data.Num_Of_Requests - 1;   -- Decrement the buffer's number
                                                                                    --  of requests
      -- If we have made it this far, set 'success' flag to 'true.'
      Success := True;

      -- Release access.
      Access_Released (Fixed_Intent);

    else
      -- We did not gain access to the fixed intent requests.
      Success := False;
    end if;  -- locked?


  end Remove_Request;


  procedure Replace_Request (For_Id : in Perf_Ads_Intent_Request_Tpkg.Reference_Id_Type;
                             With_Time : in Perf_Ads_Intent_Request_Tpkg.Time_To_Go_Type;
                             Success : out Boolean) is


--  LOCAL VARIABLES
    Matching_Index : Perf_Ads_Intent_Request_Tpkg.Request_Index_Type;

  begin    --  procedure Perf_Ads_Interface_Dpkg.Replace_Request

    -- Attempt to gain access to the fixed intent requests.
    if Access_Granted (Fixed_Intent) then

```

```
      Find_Request_In_Buffer (Reference_Id => For_Id, Index => Matching_Index);   -- Locate the Ref ID within the buff
» er

      -- Rewrite the Ref ID and store the new Requested TTG into the appropriate field.  Zero/invalidate the other
      --  fields because the existing preds are not correct for this new Requested TTG.
      Fixed_Intent_Data.Data (Matching_Index) := (Requests => (Reference_Id => For_Id, Ttg => With_Time), --
                                                  Predicted_Ttg => 0,
                                                  Lat_Lon => (Lat => 0.0, Lon => 0.0),
                                                  Altitude => 0.0,
                                                  Is_Valid => False);

      Buffer_Sort_Pkg.Bubble_Sort (Table => Fixed_Intent_Data.Data);     -- Resort the Fixed Intent Buffer

      --  Set the 'chadsttg' change set element to alert Perf to refresh the active flight plan predictions
      Sys_Change_Flags_Pkg.Set_Change_Flag (Perf_Change_Flags_Types.Chadsttg);

      -- If we have made it this far, set 'success' flag to 'true.'
      Success := True;

      -- Release access.
      Access_Released (Fixed_Intent);

    else
      -- We did not gain access to the fixed intent requests.
      Success := False;
    end if;  -- locked?


  end Replace_Request;


  procedure Number_Of_Requests (Count : out Perf_Ads_Intent_Request_Tpkg.Request_Count_Type; --
                                Success : out Boolean) is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Number_Of_Requests

    -- Attempt to gain access to the fixed intent requests.
    if Access_Granted (Fixed_Intent) then

      Count := Fixed_Intent_Data.Num_Of_Requests;

      -- If we have made it this far, set 'success' flag to 'true.'
      Success := True;

      -- Release access.
      Access_Released (Fixed_Intent);

    else
      -- We did not gain access to the fixed intent requests.
      Success := False;
      Count := 0;

    end if;  -- locked


  end Number_Of_Requests;


  procedure Get_Requests (Requests : out Perf_Ads_Intent_Request_Tpkg.Request_Storage_Type; --
                          Success : out Boolean) is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Get_Requests

    Success := False;     --  Initialize

    if Access_Granted (Fixed_Intent) then
      for Index in 1 .. Fixed_Intent_Data.Num_Of_Requests loop
        Requests (Index) := (Reference_Id => Fixed_Intent_Data.Data (Index).Requests.Reference_Id,
                             Ttg => Fixed_Intent_Data.Data (Index).Requests.Ttg);
      end loop;
      Access_Released (Fixed_Intent);
      Success := True;
    end if;

  end Get_Requests;

  procedure Search (For_Reference_Id : in Perf_Ads_Intent_Request_Tpkg.Reference_Id_Type; Found : out Boolean) is


-- LOCAL VARIABLES
    A_Match : Boolean := False;    --  Initialize to False

  begin    --  procedure Perf_Ads_Interface_Dpkg.Search

    for Search_Index in 1 .. Fixed_Intent_Data.Num_Of_Requests loop

```

```
      A_Match := (Fixed_Intent_Data.Data (Search_Index).Requests.Reference_Id = For_Reference_Id);

      exit when A_Match;

    end loop;

    Found := A_Match;

  end Search;


  function Get_Requested_Num_Waypoints return Requested_Waypoints_Index_Type is


    -- local variables
    Requested_Num_Waypoints : Requested_Waypoints_Index_Type := Default_Pred_Rte_Waypoints;
    Tmp_Predicted_Route : Portable_Types_Pkg.Natural_32 := Max_Requested_Waypoints;

  begin

    Requested_num_Waypoints := Ctp_A350_Perf_Bkgnd_Get_Bk_Data.Requested_num_Waypoints;
    Ctp_A350_Perf_Bkgnd_Get_Bk_Data.Get_Requested_Num_Waypoints_Exec := True;

    return Requested_Num_Waypoints;



  end Get_Requested_Num_Waypoints;



  procedure Get_Time_Stamp (Time_Stamp : out Time_Stamp_Rec_Type) is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Get_Time_Stamp

    if Fmcs_Partition_Data_Pkg.Ops_Time.Rtc_Status_Register.Time_Valid then

      Time_Stamp.Time.Hours := Portable_Types_Pkg.Integer_32 (Fmcs_Partition_Data_Pkg.Ops_Time.Hour);
      Time_Stamp.Time.Minutes := Portable_Types_Pkg.Integer_32 (Fmcs_Partition_Data_Pkg.Ops_Time.Minute);
      Time_Stamp.Time.Seconds := Portable_Types_Pkg.Integer_32 (Fmcs_Partition_Data_Pkg.Ops_Time.Second);
      Time_Stamp.Clock_Source_Is_Gps := Fmcs_Partition_Data_Pkg.Ops_Time.Rtc_Status_Register.Sync_To_Gps;
      Time_Stamp.Is_Valid := True;

    else  -- no valid source of time available

      Time_Stamp.Is_Valid := False;
      Time_Stamp.Time := (0, 0, 0);
      Time_Stamp.Clock_Source_Is_Gps := False;

    end if;

  end Get_Time_Stamp;


  procedure Get_Predicted_Route_Data (Data : out Predicted_Route_Data_Type; --
                                      Success : out Boolean) is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Get_Predicted_Route_Data

    if not Frame_Data_In_Use (Predicted_Route) then
      -- get frame data access token
      Frame_Data_In_Use (Predicted_Route) := True;

      Predicted_Route_Data.Preds_Recomputed_Timer := Predicted_Route_Data.Preds_Recomputed_Timer + 1;
      Data := Predicted_Route_Data;

      -- release frame data access token
      Frame_Data_In_Use (Predicted_Route) := False;
      Success := True;

    else
      -- frame data unaccessable, set all "out" parameters and status
      Data := (Num_Of_Requested_Waypoints => 0,
               Num_Of_Predicted_Waypoints => 0,
               Time_Stamp => (Time => (Hours => 0, Minutes => 0, Seconds => 0), Is_Valid => False, Clock_Source_Is_Gps
»  => False),
               Preds_Recomputed_Timer => 0,
               Fpln_Modified => False,
               Destination_Waypoint_Included => False,
               Non_Predicted_Data_Is_Valid => False,
               Predicted_Data_Is_Valid => False,
               Preds_Reference_Gmt => Gmt_Init,
               Data => (others => (Lat_Lon => (0.0, 0.0), Altitude => 0.0, Waypoint_Ttg => 0, Waypoint_Ident => (other
» s => ' '))));
      Success := False;

```

File: CTP_A350_PERF_ADS_INTERFACE.STB (continued)

```
    end if;
  end Get_Predicted_Route_Data;


  function Pred_Rte_Predicted_Data_Is_Valid return Boolean is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Pred_Rte_Predicted_Data_Is_Valid

    return Predicted_Route_Data.Predicted_Data_Is_Valid;

  end Pred_Rte_Predicted_Data_Is_Valid;


  procedure Put_Predicted_Route_Pred_Data (Data : in Perf_Pred_Rte_Rec_Type; --
                                           Success : out Boolean) is


--  LOCAL VARIABLES
    Dest_Waypoint_Deleted : Boolean := False;               -- Signals to invalidate the dest included flag
    Loc_Req_Num_Wpts : Requested_Waypoints_Index_Type;     -- Local number of requested Pred Rte points
    Loc_Time_Stamp : Time_Stamp_Rec_Type;                  -- Local Time Stamp record

  begin    --  procedure Perf_Ads_Interface_Dpkg.Put_Predicted_Route_Pred_Data

    Success := False;      --  Initialize

    if Access_Granted (Predicted_Route) then

      --  Obtain the *current* number of requested Predicted Route Waypoints
      Loc_Req_Num_Wpts := Get_Requested_Num_Waypoints;
      Predicted_Route_Data.Num_Of_Requested_Waypoints := Loc_Req_Num_Wpts;

      --  Obtain the number of Predicted Route Waypoints predicted by Perf, then limit it to
      --  the number of requested Predicted Route Waypoints + Pred_Rte_Pad
      Predicted_Route_Data.Num_Of_Predicted_Waypoints := Data.Num_Of_Predicted_Waypoints;
      if Predicted_Route_Data.Num_Of_Predicted_Waypoints > Loc_Req_Num_Wpts + Pred_Rte_Pad then

        Predicted_Route_Data.Num_Of_Predicted_Waypoints := Loc_Req_Num_Wpts + Pred_Rte_Pad;
        --
        -- If the dest was included, it will be cut out as it is assumed to be the last point
        -- This operation cuts off the last predicted route points in the buffer
        --
        Dest_Waypoint_Deleted := True;
      end if;

      --  Copy the Waypoint Lat, Lon, Altitude, TTG and Ident for all predicted waypoints
      Predicted_Route_Data.Data (1 .. Predicted_Route_Data.Num_Of_Predicted_Waypoints) :=
         Data.Data (1 .. Predicted_Route_Data.Num_Of_Predicted_Waypoints);

      --  Copy the reference GMT
      Predicted_Route_Data.Preds_Reference_Gmt := Data.Preds_Reference_Gmt;

      --  Copy the Destination Waypoint Included flag
      Predicted_Route_Data.Destination_Waypoint_Included := --
         Data.Destination_Waypoint_Included and then not Dest_Waypoint_Deleted;

      -- Obtain and store the Time Stamp
      Get_Time_Stamp (Loc_Time_Stamp);
      Predicted_Route_Data.Time_Stamp := Loc_Time_Stamp;

      Predicted_Route_Data.Preds_Recomputed_Timer := 0;            -- Reset the timer to zero

      Predicted_Route_Data.Non_Predicted_Data_Is_Valid := True;    -- Set the non-predicted data validity flag to True
      Predicted_Route_Data.Predicted_Data_Is_Valid := True;        -- Set the predicted data validity flag to True

      Access_Released (Predicted_Route);
      Success := True;
    end if;

  end Put_Predicted_Route_Pred_Data;


  procedure Get_Intermediate_Intent_Data (Data : out Intermediate_Intent_Data_Type; --
                                          Success : out Boolean) is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Get_Intermediate_Intent_Data

    if not Frame_Data_In_Use (Intermediate_Intent) then
      -- get frame data access token
      Frame_Data_In_Use (Intermediate_Intent) := True;

      Intermediate_Intent_Data.Preds_Recomputed_Timer := Intermediate_Intent_Data.Preds_Recomputed_Timer + 1;
      Data := Intermediate_Intent_Data;

      -- release frame data access token
      Frame_Data_In_Use (Intermediate_Intent) := False;
      Success := True;

    else
      -- frame data unaccessable, set all "out" parameters and status
      Data := (Num_Of_Predicted_Points => 0,
               Time_Stamp => (Time => (Hours => 0, Minutes => 0, Seconds => 0), Is_Valid => False, Clock_Source_Is_Gps
»  => False),
               Preds_Recomputed_Timer => 0,
               Predicted_Data_Is_Valid => False,
               Data => (others => (Distance => 0.0, Track => 0.0, Altitude => 0.0, Ttg => 0)));
      Success := False;

    end if;

  end Get_Intermediate_Intent_Data;


  procedure Put_Intermediate_Intent_Pred_Data (Data : in Perf_Intermediate_Intent_Rec_Type; Success : out Boolean) is


--  LOCAL VARIABLES
    Loc_Time_Stamp : Time_Stamp_Rec_Type;                    -- Local Time Stamp record

  begin    --  procedure Perf_Ads_Interface_Dpkg.Put_Intermediate_Intent_Pred_Data

    Success := False;      --  Initialize

    if Access_Granted (Intermediate_Intent) then

      --  Obtain the number of predicted Intermediate Intent Points
      Intermediate_Intent_Data.Num_Of_Predicted_Points := Data.Num_Of_Predicted_Points;

      --  Copy Intermediate Intent Dist, Track, Altitude, and TTG for all predicted points
      Intermediate_Intent_Data.Data (1 .. Intermediate_Intent_Data.Num_Of_Predicted_Points) :=
         Data.Data (1 .. Intermediate_Intent_Data.Num_Of_Predicted_Points);

      --  Obtain and store the Time Stamp
      Get_Time_Stamp (Loc_Time_Stamp);
      Intermediate_Intent_Data.Time_Stamp := Loc_Time_Stamp;

      Intermediate_Intent_Data.Preds_Recomputed_Timer := 0;       -- Reset the timer to zero

      Intermediate_Intent_Data.Predicted_Data_Is_Valid := True;   -- Set the predicted data validity flag to True

      Access_Released (Intermediate_Intent);
      Success := True;
    end if;

  end Put_Intermediate_Intent_Pred_Data;


  procedure Get_Fixed_Intent_Data (Data : out Fixed_Intent_Data_Type; --
                                   Success : out Boolean) is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Get_Fixed_Intent_Data

    if not Frame_Data_In_Use (Fixed_Intent) then

      -- get frame data access token
      Frame_Data_In_Use (Fixed_Intent) := True;

      Fixed_Intent_Data.Preds_Recomputed_Timer := Fixed_Intent_Data.Preds_Recomputed_Timer + 1;
      Data := Fixed_Intent_Data;

      -- release frame data access token
      Frame_Data_In_Use (Fixed_Intent) := False;
      Success := True;

    else
      -- frame data unaccessable, set all "out" parameters and status
      Data := (Num_Of_Requests => 0,
               Num_Of_Predicted_Points => 0,
               Time_Stamp => (Time => (Hours => 0, Minutes => 0, Seconds => 0), Is_Valid => False, Clock_Source_Is_Gps
»  => False),
               Preds_Recomputed_Timer => 0,
               Data => (others => (Lat_Lon => (Lat => 0.0, Lon => 0.0),
                                   Altitude => 0.0,
                                   Requests => (Reference_Id => 0, Ttg => 0),
                                   Predicted_Ttg => 0,
                                   Is_Valid => False)));
      Success := False;

    end if;

  end Get_Fixed_Intent_Data;


  procedure Put_Fixed_Intent_Pred_Data (Data : in Perf_Fixed_Intent_Rec_Type; Success : out Boolean) is


--  LOCAL VARIABLES
    Loc_Time_Stamp : Time_Stamp_Rec_Type;                                 -- Local Time Stamp record
    Num_Of_Matches : Perf_Ads_Intent_Request_Tpkg.Request_Count_Type := 0;  -- Number of matches between predicted and
»  buffer
                                                                            -- Ref IDs/Requested TTGs;  Initialize to
» zero.

  begin    --  procedure Perf_Ads_Interface_Dpkg.Put_Fixed_Intent_Pred_Data

    Success := False;     --  Initialize

    if Access_Granted (Fixed_Intent) then

      Fixed_Intent_Buffer_Points:   -- Outer loop to step through all points in the existing Fixed Intent Buffer
        for Buffer_Index in Perf_Ads_Intent_Request_Tpkg.Request_Index_Type range 1 .. Fixed_Intent_Data.Num_Of_Reques
» ts loop

          Fixed_Intent_Preds:   -- Inner loop to step through the predicted Fixed Intent points
            for Preds_Index in Perf_Ads_Intent_Request_Tpkg.Request_Index_Type range 1 .. Data.Num_Of_Predicted_Points
»  loop

              --  Check if buffer Reference ID and Requested TTG match the predicted data's Reference ID and Requested
»  TTG
              if (Fixed_Intent_Data.Data (Buffer_Index).Requests.Reference_Id =
                  Data.Data (Preds_Index).Requests.Reference_Id) and then
                 (Fixed_Intent_Data.Data (Buffer_Index).Requests.Ttg = Data.Data (Preds_Index).Requests.Ttg) then

                --  The buffer's Reference ID and TTG match the predicted data's Reference ID and TTG, so copy the
                --  corresponding predicted data into the buffer record that corresponds to this Ref ID/Requested TTG.
                --  We cannot use a block copy of the complete Data.Data array because of the need to insure that
                --  the Reference ID and Requested TTG match.
                --  We do, however, use a block copy of the selected Data.Data record.  Even though this record contai
» ns
                --  the requested Ref ID and TTG, it's okay to copy these values because we've just verified
                --  that they match.
                Fixed_Intent_Data.Data (Buffer_Index) := Data.Data (Preds_Index);

                Num_Of_Matches := Num_Of_Matches + 1;     -- Increment the "number of matches" counter

                exit Fixed_Intent_Preds;                  -- Exit the inner (Fixed_Intent_Preds) loop

              end if;

            end loop Fixed_Intent_Preds;

        end loop Fixed_Intent_Buffer_Points;

        --  Set the number of predicted points equal to the number of matched points, NOT the number of predicted poin
» ts
        --  passed in through the DATA parameter.
        --  Some buffer points may be so new they're not predicted; similarly, some predicted points may no longer be
        --  in the buffer, and are thus discarded.  The number of predicted points should represent the number of
        --  buffer points that contain predicted data.
      Fixed_Intent_Data.Num_Of_Predicted_Points := Num_Of_Matches;

      -- Obtain and store the Time Stamp
      Get_Time_Stamp (Loc_Time_Stamp);
      Fixed_Intent_Data.Time_Stamp := Loc_Time_Stamp;

      Fixed_Intent_Data.Preds_Recomputed_Timer := 0;        -- Reset the timer to zero

      Access_Released (Fixed_Intent);
      Success := True;
    end if;

  end Put_Fixed_Intent_Pred_Data;


  function Ads_Is_Enabled return Boolean is


  begin    --  function Perf_Ads_Interface_Dpkg.Ads_Is_Enabled

    return (Options_And_Data_Pkg.Ats_Enable and then Atc_Discretes_Pkg.Ads_Enabled);

  end Ads_Is_Enabled;


  procedure Extract_Lgb_Predicted_Route_Data (Fpln : in Fmcs_Fp_Guid_Btypes.Flight_Plan_Id_Type; Success : out Boolean
» ) is


--  LOCAL VARIABLES
    Destglidx : Flight_Pln_Leg_Types.Leg_Index_Type;       -- Destination leg index
    Activeglidx : Flight_Pln_Leg_Types.Leg_Index_Type;     -- Active leg index
    Gleg : Flight_Pln_Leg_Types.Leg_Rec;                   -- Local copy of a guidance leg
    Glidx : Flight_Pln_Leg_Types.Leg_Index_Type;           -- A generic guidance leg index
    Guidhdr : Flight_Pln_Hdr_Types.Flight_Pln_Hdr_Rec;     -- Local copy of guidance header
    Lastlegidx : Flight_Pln_Leg_Types.Leg_Index_Type;      -- Last-leg leg index
    Loc_Req_Num_Wpts : Requested_Waypoints_Index_Type;     -- Local number of requested Pred Rte points
    Nextgleg : Flight_Pln_Leg_Types.Leg_Rec;               -- Local copy of the next guidance leg
    Numfoundpts : Predicted_Waypoints_Index_Type := 0;     -- Number of points found in flight plan; Initialize to zer
» o
    Success1 : Boolean := False;                           -- Success indicator; Initialize to False
    Success2 : Boolean := False;                           -- Success indicator; Initialize to False
    Success3 : Boolean := False;                           -- Success indicator; Initialize to False

  begin     --  procedure Perf_Ads_Interface_Dpkg.Extract_Lgb_Predicted_Route_Data

    --  Obtain the *current* number of requested Predicted Route Waypoints
    Loc_Req_Num_Wpts := Get_Requested_Num_Waypoints;

    --  Obtain some needed critical indices from the Guidance Header
    Common_Lgb.Getlgbhdr (Fmcs_Fp_Guid_Btypes.Flight_Planning, Fpln, Guidhdr);
    Glidx := Guidhdr.Critidx (Flight_Pln_Hdr_Types.Firstleg);
    Lastlegidx := Guidhdr.Critidx (Flight_Pln_Hdr_Types.Lastleg);
    Destglidx := Guidhdr.Critidx (Flight_Pln_Hdr_Types.Destwpt);

    if Glidx /= 0 then
      --
      --  The first leg in the LGB is either the Origin waypoint (in Preflight) or the FROM
      --  waypoint (all other cases with a flight plan).  The Guidance Leg needed is the next in the LGB.
      --  If the leg index is zero, do nothing.  The next IF statement will handle this error case.
      --
      Common_Lgb.Getlgbleg (Fmcs_Fp_Guid_Btypes.Flight_Planning, Glidx, Gleg);
      Glidx := Gleg.Nextfpn;
      Activeglidx := Glidx;
    end if;

    if (Loc_Req_Num_Wpts = 0) or else (Glidx = Lastlegidx) or else (Glidx = 0) then
      --  One of the following conditions are met:
      --    - The newly-obtained number of requested Predicted Route Waypoints is zero;
      --    - The First Leg Index = Last Leg Index, meaning there are no waypoints in the flight plan.
      --    - The First Leg Index = 0, meaning something is wrong in the flight plan.
      --  In any of these scenarios, do the following:
      --    - Set the number of predicted waypoints to zero;
      --    - Set the predicted data and non-predicted data validity flags to false
      if Access_Granted (Predicted_Route) then
        Predicted_Route_Data.Num_Of_Predicted_Waypoints := 0;
        Access_Released (Predicted_Route);
        Success1 := True;
      else
        Success1 := False;
      end if;

      if Success1 then
        Invalidate_Buffer_Preds (Buffer => Perf_Ads_Interface_Dpkg.Predicted_Route,
                                 Success => Success2); -- Invalidate Pred Route Alt & TTG
        if Success2 then
          Invalidate_Pred_Route_Wpt_Data (Success => Success3); -- Invalidate Pred Route Wpt Ident/Lat/Lon
        end if;
      end if;

      --  Determine the overall success of these tasks
      Success := Success1 and then Success2 and then Success3;

    else
      --  The following conditions exist:
      --    - The newly-obtained number of requested Predicted Route Waypoints is NOT zero;
      --    - Waypoints exist in the flight plan;
      --    - The First Leg Index does not equal zero;
      --  Extract the data from each leg, looping until one of the following conditions are met:
      --    - The number of requested Predicted Route Waypoints has been fulfilled;
      --    - The Destination has been reached (if it exists);
      --    - The last leg of the flight plan has been reached (if no Destination exists);
      --    - The next leg index = 0, meaning something is wrong in the flight plan;
      if Access_Granted (Predicted_Route) then
        Predicted_Route_Data.Num_Of_Requested_Waypoints := Loc_Req_Num_Wpts;
        loop
          Common_Lgb.Getlgbleg (Fmcs_Fp_Guid_Btypes.Flight_Planning, Glidx, Gleg);

          -- if the next leg is valid then retrieve it so we can check for next leg having an offset.
          if (Gleg.Nextfpn /= 0) then
            Common_Lgb.Getlgbleg (Fmcs_Fp_Guid_Btypes.Flight_Planning, Gleg.Nextfpn, Nextgleg);
          end if;

          if Is_Pred_Rte_Waypoint(Pathterm => Ps_Ads_Gleg.Pathterm,
                                  Glidx => Glidx,
                                  Activelidx => Activeglidx,
                                  Is_Atc_Waypoint => Ps_Ads_Gleg.Atc_waypoint) then
            --
            --  Accept only legs with path termination of type 'xF' or HM exit fixes
            --
            Numfoundpts := Numfoundpts + 1;
            --  Obtain the Pred Route Waypoint Lat/Lon
            --  The Lat/Lon of the current leg's Turnpoint 3 is used if all of the following conditions are true:
            --    - The current leg is part of a lateral offset;
            --    - The next leg is available;
            --    - The next leg is part of a lateral offset;
            --  Otherwise, the Lat/Lon of the To waypoint is used.
       --  Note that the "next leg is not available" condition must be tested BEFORE the "next leg is not part of a la
» teral offset"
            --  condition because if the next leg is NOT available, we don't want to look at the Nextgleg.
            if Gleg.Cduoffset and then
               Gleg.Nextfpn /= 0 and then
               Nextgleg.Cduoffset then
              Predicted_Route_Data.Data (Numfoundpts).Lat_Lon := Gleg.Turnpt3;     -- Already normalized (-180 to +180
» )
            else
              Predicted_Route_Data.Data (Numfoundpts).Lat_Lon := Gleg.Tolatlon;     -- Already normalized (-180 to +18
» 0)
            end if;
            Predicted_Route_Data.Data (Numfoundpts).Waypoint_Ident := Gleg.Fixident;
          end if;

          --
          -- Determine if the Destination waypoint is in the Extracted Buffer
          --
          Predicted_Route_Data.Destination_Waypoint_Included := (Glidx = Destglidx) or else (Glidx = Lastlegidx);

          exit when (Numfoundpts = Predicted_Route_Data.Num_Of_Requested_Waypoints + Pred_Rte_Pad) or else
                       (Glidx = Destglidx) or else (Glidx = Lastlegidx) or else (Gleg.Nextfpn = 0);

          Glidx := Gleg.Nextfpn;  -- Set the guidance leg index to point to the next waypoint
        end loop;

        Predicted_Route_Data.Num_Of_Predicted_Waypoints := Numfoundpts;
        Predicted_Route_Data.Non_Predicted_Data_Is_Valid := True;   -- Set the non-predicted data validity flag to Tru
» e

        Access_Released (Predicted_Route);
        Success := True;
      else
        Success := False;
      end if;

    end if;
```

```

  end Extract_Lgb_Predicted_Route_Data;


  procedure Invalidate_Buffer_Preds (Buffer : in Frame_Type; Success : out Boolean) is


  begin     --  procedure Perf_Ads_Interface_Dpkg.Invalidate_Buffer_Preds

    Success := False;      --  Initialize

    if (Buffer = Predicted_Route) and then Access_Granted (Predicted_Route) then
      Predicted_Route_Data.Predicted_Data_Is_Valid := False;         -- Invalidate Pred Route Buffer's Alt & TTG
      Access_Released (Predicted_Route);
      Success := True;
    elsif (Buffer = Intermediate_Intent) and then Access_Granted (Intermediate_Intent) then
      Intermediate_Intent_Data.Predicted_Data_Is_Valid := False;     -- Invalidate Interm. Intent Dist, Track, Alt, &
» TTG
      Access_Released (Intermediate_Intent);
      Success := True;
    elsif (Buffer = Fixed_Intent) and then Access_Granted (Fixed_Intent) then
      for Index in 1 .. Fixed_Intent_Data.Num_Of_Requests loop
        Fixed_Intent_Data.Data (Index).Is_Valid := False;            -- Invalidate Fixed Intent Buffer's Lat, Lon, & A
» lt
      end loop;
      Access_Released (Fixed_Intent);
      Success := True;
    end if;

  end Invalidate_Buffer_Preds;


  procedure Invalidate_Pred_Route_Wpt_Data (Success : out Boolean) is


  begin     --  procedure Perf_Ads_Interface_Dpkg.Invalidate_Pred_Route_Wpt_Data

    Success := False;      --  Initialize

    if Access_Granted (Predicted_Route) then
      Predicted_Route_Data.Non_Predicted_Data_Is_Valid := False;      -- Invalidate Pred Route Waypoint Ident & Lat/Lo
» n
      Access_Released (Predicted_Route);
      Success := True;
    end if;

  end Invalidate_Pred_Route_Wpt_Data;


  procedure Shorten_Predicted_Route_Data (Success : out Boolean; --
                                          Num_Wpt_Sequenced : in Portable_Types_Pkg.Integer_32 := 0) is


    --
    --  LOCAL VARIABLES
    --
    Wpts_To_Delete : Portable_Types_Pkg.Integer_32 := Num_Wpt_Sequenced; -- Counter through the sequenced waypoints

  begin     --  procedure Perf_Ads_Interface_Dpkg.Shorten_Predicted_Route_Data

    Success := False;       --  Initialize

    --
    -- If no waypoints are to be deleted, then just invalidate the predicted data.
    -- This should only occur when sequencing onto a hold or crossing the exit
    -- fix of a hold when not exiting
    --
    if ( Wpts_To_Delete = 0 ) then

      Predicted_Route_Data.Predicted_Data_Is_Valid := False;
    else
      --
      --  Waypoints to delete, cycle through
      --
      while ( Wpts_To_Delete > 0 ) and then ( Predicted_Route_Data.Num_Of_Predicted_Waypoints > 0 ) loop

        if Predicted_Route_Data.Num_Of_Predicted_Waypoints = 1 then
          --
          --  There's only one waypoint in the Predicted Route Buffer, so set the number of predicted waypoints
          --  to zero and set the predicted data and non-predicted data validity flags to false:
          Predicted_Route_Data.Num_Of_Predicted_Waypoints := 0;

          -- Invalidate Pred Route Alt & TTG
          Predicted_Route_Data.Predicted_Data_Is_Valid := False;

          -- Invalidate Pred Route Wpt Ident/Lat/Lon
          Predicted_Route_Data.Non_Predicted_Data_Is_Valid := False;

      elsif Predicted_Route_Data.Num_Of_Predicted_Waypoints > 1 then
        --
        --  Bump each waypoint and its data up one position in the Predicted Route Buffer
        --
        Predicted_Route_Data.Data( 1..Predicted_Route_Data.Num_Of_Predicted_Waypoints - 1 ) :=
            Predicted_Route_Data.Data( 2..Predicted_Route_Data.Num_Of_Predicted_Waypoints );

        --  Decrement the number of predicted waypoints by one
        Predicted_Route_Data.Num_Of_Predicted_Waypoints := Predicted_Route_Data.Num_Of_Predicted_Waypoints - 1;
      end if;

      --
      -- Decrement the waypoint counter
      --
      Wpts_To_Delete := Wpts_To_Delete - 1;
    end loop;

    Success := True;

  end if;

end Shorten_Predicted_Route_Data;


procedure Put_Fpln_Modified (Data : in Boolean; --
                             Invalidate_Buffer_Data : in Boolean; --
                             Success : out Boolean;
                             Num_Wpt_Sequenced : in Portable_Types_Pkg.Integer_32 := 0) is


  Predicted_Frame_Success_1 : Boolean := False;

begin      --  procedure Perf_Ads_Interface_Dpkg.Fpln_Modified

  Success := True;

  --  If conditions dictate, invalidate the buffer data first
  if Data then

    --  The FPLN Modified request has been set True by FPLN
    if Invalidate_Buffer_Data then
      --
      --  Invalidate the Pred Route Buffer data (signaled only by FPLN, but NOT due to a Lateral Sequence
      -- Invalidate Pred Route Alt & TTG
```

```
        --
        Invalidate_Buffer_Preds( Perf_Ads_Interface_Dpkg.Predicted_Route, Predicted_Frame_Success_1 );
        Success := Predicted_Frame_Success_1;
        Fpln_Event_Status.Fpln_Changed := True;
      else
        --
        --  The FPLN Modified request has been sent by FPLN due only to a Lateral Sequence.  In this case,
        --  do NOT invalidate the Pred Route Buffer data. Also, do not unconditionally delete the first
        --  waypoint in the buffer. Wait until access has been granted.
        Fpln_Event_Status.Leg_Sequenced := True;
      end if;
    end if;


    if Access_Granted( Predicted_Route ) then

      --  Call the Shorten_Predicted_Route_Data procedure to delete the first waypoint in the buffer
      --  if a waypoint has been sequenced.
      --  Indicate to the Shorten procedure how many waypoints to shorten by.
      if Fpln_Event_Status.Leg_Sequenced then
        Shorten_Predicted_Route_Data(Success => Success, Num_Wpt_Sequenced => Num_Wpt_Sequenced);
      end if;

      --  Set the Fpln_Modified request
      Predicted_Route_Data.Fpln_Modified := Data;
      Access_Released( Predicted_Route );
    else
      Success := False;
    end if;

  end Put_Fpln_Modified;


  function Get_Fpln_Event_Status return Fpln_Event_Rec_Type is

    Loc_Fpln_Event_Status : Fpln_Event_Rec_Type;  -- Local copy of object manager data

  begin    --  function Perf_Ads_Interface_Dpkg.Get_Fpln_Event_Status

    --
    -- Copy the official object manager data
    --
    Loc_Fpln_Event_Status := Fpln_Event_Status;  -- Copy the official data

```

File: CTP_A350_PERF_ADS_INTERFACE.STB (continued)

```
    --
    -- Invalidate the object manager data as it has been read now
    --
    Fpln_Event_Status := (False, False);

    --
    -- Return the status flags to the requestor
    --
    return Loc_Fpln_Event_Status;

  end Get_Fpln_Event_Status;


  procedure Purge_Fixed_Intent_Requests (Success : out Boolean) is


  begin    --  procedure Perf_Ads_Interface_Dpkg.Purge_Fixed_Intent_Requests

    -- Attempt to gain access to the fixed intent requests.
    if Access_Granted (Fixed_Intent) then

      Fixed_Intent_Data :=
         (Num_Of_Requests => 0,
          Num_Of_Predicted_Points => 0,
          Time_Stamp => (Time => (Hours => 0, Minutes => 0, Seconds => 0), Is_Valid => False, Clock_Source_Is_Gps => F
» alse),
          Preds_Recomputed_Timer => 0,
          Data => (others => (Lat_Lon => (Lat => 0.0, Lon => 0.0),
                              Altitude => 0.0,
                              Requests => (Reference_Id => 0, Ttg => 0),
                              Predicted_Ttg => 0,
                              Is_Valid => False)));

      -- If we have made it this far, set 'success' flag to 'true.'
      Success := True;

      -- Release access.
      Access_Released (Fixed_Intent);

    else
      -- We did not gain access to the fixed intent requests.
      Success := False;
    end if;  -- locked?

end Purge_Fixed_Intent_Requests;


function All_Waypoints_Available return Boolean is


begin

  return (Predicted_Route_Data.Num_Of_Predicted_Waypoints >= Predicted_Route_Data.Num_Of_Requested_Waypoints) or els
» e
            Predicted_Route_Data.Destination_Waypoint_Included;

end All_Waypoints_Available;


function Is_Pred_Rte_Waypoint
  (
  Pathterm   : in Lateral_Path_Type_Tpkg.Pathtype;
  Glidx      : in Flight_Pln_Leg_Types.Leg_Index_Type;
  Activelidx : in Flight_Pln_Leg_Types.Leg_Index_Type;
  Is_Atc_Waypoint  : in Boolean
  ) return Boolean is

 Loc_Success  : Boolean := False;
begin
  --
  -- Only ATC waypoints are to be included in the ADS Predicted Route:
  -- HM exit fix is included only when it is the Active leg for Guidance (it represents the TO waypoint)
  -- and it is also an ATC waypoint or an HA ident is included if it is the active leg,
  -- otherwise all ATC waypoints (if within frame range) should be included
  --

  if ( Is_Atc_Waypoint or else Pathterm = Lateral_Path_Type_Tpkg.Ha) then

    Loc_Success := True;

    if ((Pathterm = Lateral_Path_Type_Tpkg.Hm  or else Pathterm = Lateral_Path_Type_Tpkg.Ha) and then Glidx /= Activ
» elidx) then

        Loc_Success := False;

    end if;

  end if;
```

```

    return Loc_Success;
  end Is_Pred_Rte_Waypoint;


  procedure Get_ATC_Ident (ATC_Wpt_Ident : out Base_Domain_Services_Tpkg.String_17_Type ) is   -- ATC formatted fix id
» ent
-- An ICD update needs to be completed before this procedure can be used.  Since the interface
-- spec has already been defined, this procedure needs a body.
-- No calls are made to this procedure and once the ICD is updated, this procedure can be used as intended, and this c
» omment removed



  --LOCAL VARIABLES
  Temp_Lat_Lon_Rec : Atc_Msg_Common_Types_Pkg.Atc_Lat_Lon_Rec; --holds the record set returned from Convert_Saf call
  Temp_Brg         : Portable_Types_Pkg.Integer_32;     --holds bearing to be converted to a string

  begin    --  procedure Get_ATC_Ident

    ATC_Wpt_Ident(1..17) := "                 "; --initialize/clear waypoint ident

    if ((Ps_Ads_Gleg.Llfixtype = Fmcs_Fp_Guid_Btypes.Pbdwpt) and then (Ps_Ads_Gleg.Fixbrgdisval)) then

       ATC_Wpt_Ident(1..7) := Ps_Ads_Gleg.Parent1_Ident(1..7);   --get Parent fix ident


       --Bearing sent to ATC by the ADS will always be magnetic north referenced,
       --regardless of how the pilot entered the bearing and independent of the true/mag switch setting.
       Temp_Brg := Portable_Types_Pkg.Integer_32(Ps_Ads_Gleg.Fixbrgmag);

       if ( Temp_Brg < 0 ) then --scale range 0 to 360, instead of -180 to 180
         Temp_Brg := 360 + Temp_Brg;
       end if;

       ATC_Wpt_Ident(8..11) := "/" & Number_To_Text_Pkg.String_Of(Integer_Number => Temp_Brg,
                                                                  Width => 3,
                                                                  Fill_Type => Text_Format_Tpkg.Zero_Fill,
                                                                  Justification => Text_Format_Tpkg.Right_Justify);

       --check the distance and put on the end of string
     ATC_Wpt_Ident(12..17) := "/" & Number_To_Text_Pkg.String_Of(Float_Number => Portable_Types_Pkg.Float_64 (Ps_Ads_G
» leg.Fixdist),
                                                                   Width => 5,
                                                                   Decimal_Places => 1,
                                                                   Fill_Type => Text_Format_Tpkg.Zero_Fill,
                                                                   Justification => Text_Format_Tpkg.Right_Justify);

    elsif (Ps_Ads_Gleg.Llfixtype = Fmcs_Fp_Guid_Btypes.Plainlatlon) then

        --convert to deg/min format and store in a temp record
       Temp_Lat_Lon_Rec := Fmf_Fpi_Atc_Common_Util_Pkg.Convert_Saf (To_Lat_Lon => Ps_Ads_Gleg.tolatlon);

        --convert numerical values to a string and concatenate into ATC waypoint ident
       ATC_Wpt_Ident(1..2) := Number_To_Text_Pkg.String_Of(Integer_Number => Temp_Lat_Lon_Rec.Latitude.Degrees,
                                                           Width => 2,
                                                           Fill_Type => Text_Format_Tpkg.Zero_Fill,
                                                           Justification => Text_Format_Tpkg.Right_Justify);

        --round and scale LAT minutes
       Temp_Lat_Lon_Rec.Latitude.Minutes := Portable_Types_Pkg.Integer_32(
                                            Math_Pkg.Round(Portable_Types_Pkg.Float_32(Temp_Lat_Lon_Rec.Latitude.Minut
» es) * 0.1));

       if (Temp_Lat_Lon_Rec.Latitude.Minutes = 60 ) then
          Temp_Lat_Lon_Rec.Latitude.Minutes:= 0;
       end if;

       ATC_Wpt_Ident(3..5) := ":" & Number_To_Text_Pkg.String_Of(Integer_Number =>
                                                                 Portable_Types_Pkg.Integer_32 (Temp_Lat_Lon_Rec.Latit
» ude.Minutes),
                                                                 Width => 2,
                                                                 Fill_Type => Text_Format_Tpkg.Zero_Fill,
                                                                 Justification => Text_Format_Tpkg.Right_Justify);

       if (Temp_Lat_Lon_Rec.Latitude.Direction = Atc_Msg_Common_Types_Pkg.North) then  --determine latitude direction
         ATC_Wpt_Ident(6..7) := "N/";
       else
         ATC_Wpt_Ident(6..7) := "S/";
       end if;


       ATC_Wpt_Ident(8..10) := Number_To_Text_Pkg.String_Of(Integer_Number => Temp_Lat_Lon_Rec.Longitude.Degrees,
                                                            Width => 3,
                                                            Fill_Type => Text_Format_Tpkg.Zero_Fill,
                                                            Justification => Text_Format_Tpkg.Right_Justify);

        --round and scale LON minutes
       Temp_Lat_Lon_Rec.Longitude.Minutes := Portable_Types_Pkg.Integer_32(
                                             Math_Pkg.Round(Portable_Types_Pkg.Float_32(Temp_Lat_Lon_Rec.Longitude.Min
» utes) * 0.1));

       if (Temp_Lat_Lon_Rec.Longitude.Minutes = 60 ) then
           Temp_Lat_Lon_Rec.Longitude.Minutes := 0;
       end if;

       ATC_Wpt_Ident(11..13) := ":" & Number_To_Text_Pkg.String_Of(Integer_Number =>
                                                                 Portable_Types_Pkg.Integer_32 (Temp_Lat_Lon_Rec.Longi
» tude.Minutes),
                                                                   Width => 2,
                                                                   Fill_Type => Text_Format_Tpkg.Zero_Fill,
                                                                   Justification => Text_Format_Tpkg.Right_Justify);

       if (Temp_Lat_Lon_Rec.Longitude.Direction = Atc_Msg_Common_Types_Pkg.East) then  --determine longitude direction
         ATC_Wpt_Ident(14..14) := "E";
       else
         ATC_Wpt_Ident(14..14) := "W";
       end if;

    else

       ATC_Wpt_Ident(1..7) := Ps_Ads_Gleg.Fixident;

    end if;

  end Get_ATC_Ident;

end Perf_Ads_Interface_Dpkg;
```

Mode: All Lines

File: CTP_A350_Io_Engine_Data_Dpkg.STB

```
--
--    STUB File
--
--    CTP_A350_Io_Engine_Data_Dpkg.STB
--
--    REASONS FOR STUBBING : function  Wing_Anti_Ice.Data, Wing_Anti_Ice.Is_Valid, Engine_Anti_Ice.Data, Engine_Anti_I
» ce..Is_Valid
--                           Air_Conditioning.Data, Air_Conditioning.Is_Valid are stubbed out

--     File Name: PRF_BKGND_PKG_GET_BK_DATA.ADA


with Base_Domain_Services_Tpkg;
with Fmcs_Partition_Data_Pkg;
--with Io_PRIM_Sel_Pkg;
with Io_PRIM_1_Sel_Pkg;

with Io_Pcs_Sel_Pkg;
with CTP_A350_PERF_BKGND_GET_BK_DATA;
use CTP_A350_PERF_BKGND_GET_BK_DATA;

use Base_Domain_Services_Tpkg;

package body Io_Engine_Data_Dpkg is



  package body Anti_Ice is   --


        function Data return Boolean is


      Sel_Anti_Ice : Boolean := False;

      begin

        Sel_Anti_Ice:= CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Anti_Ice_Data;

        return Sel_Anti_Ice;

       end Data;
```

```

     function Is_Valid return Boolean is
     begin

     return CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid;

     end Is_Valid;

end Anti_Ice;


  package body Wing_Anti_Ice is   --


     function Data return Boolean is

      Sel_Wing_Anti_Ice : Boolean := False;
    begin

        Sel_Wing_Anti_Ice := CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Wing_Anti_Ice_Data;
        return Sel_Wing_Anti_Ice;

     end Data;

     function Is_Valid return Boolean is

     begin

         return CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid;

     end Is_Valid;

  end Wing_Anti_Ice;


  package body Engine_Anti_Ice is




     function Data return Boolean is

     Sel_Eng_Anti_Ice : Boolean := False;

```

```
      begin

        Sel_Eng_Anti_Ice := CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Eng_Anti_Ice_Data;
        return Sel_Eng_Anti_Ice;

       end Data;

       function Is_Valid return Boolean is
       begin

         return CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid;

       end Is_Valid;

    end Engine_Anti_Ice;

    package body Air_Conditioning is

      function Data return Boolean is

      Sel_Air_Cond : Boolean := False;

      begin

       Sel_Air_Cond := CTP_A350_PERF_BKGND_GET_BK_DATA.Sel_Air_Cond_Data;
       return Sel_Air_Cond;

      end Data;

      function Is_Valid return Boolean is
      begin

      return CTP_A350_PERF_BKGND_GET_BK_DATA.Is_Valid;

      end Is_Valid;

    end Air_Conditioning;

  package body Engine_Thrust_Sufficiency is

      function Data return Boolean is --
      begin
          --|return (Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Engine2_Above_8
» 5pcts and then
```

File: CTP_A350_Io_Engine_Data_Dpkg.STB (continued)

```
          --|        Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Engine3_Above_8
» 5pcts);

        if( (Io_Pcs_Sel_Pkg.Io_Pcs_Selected_Source.Pcs1.all.Io_EIF_ENGINE_DATA_MSG_Rec.ENGINE_STATUS_DIS.ENG_AT_TAKE_O
» FF_POWER)
             and then
            (Io_Pcs_Sel_Pkg.Io_Pcs_Selected_Source.Pcs2.all.Io_EIF_ENGINE_DATA_MSG_Rec.ENGINE_STATUS_DIS.ENG_AT_TAKE_O
» FF_POWER) )
            then

        return True;

      else

        return False;

      end if;
      end Data;

      function Is_Valid return Boolean is --
      begin
          --|return (Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Validity_Rec.FRAME_120_Disc_Word_5);

      if( (Io_Pcs_Sel_Pkg.Io_Pcs_Selected_Source.Pcs1.all.Io_EIF_ENGINE_DATA_MSG_Validity_Rec.ENGINE_STATUS_DIS) and t
» hen
          (Io_Pcs_Sel_Pkg.Io_Pcs_Selected_Source.Pcs2.all.Io_EIF_ENGINE_DATA_MSG_Validity_Rec.ENGINE_STATUS_DIS) ) the
» n

        return True;

      else

        return False;

      end if;

      end Is_Valid;

  end Engine_Thrust_Sufficiency;

  package body Engines_Off is   --

       function Data return Boolean is
       begin
```

```
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Engines_Off;
        return Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engines_Off;
     end Data;

     function Is_Valid return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Validity_Rec.FRAME_120_Disc_Word_5;
        return Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.FRAME_40_Disc_Word_5;
     end Is_Valid;

end Engines_Off;

package body Inboard_Engine_Healthy_1 is   --

     function Data return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Engine_Healthy_1_Inboard;
        return Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engine_Healthy_1_Inboard;
     end Data;

     function Is_Valid return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Validity_Rec.FRAME_120_Disc_Word_5;
        return Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.FRAME_40_Disc_Word_5;
     end Is_Valid;

end Inboard_Engine_Healthy_1;

package body Inboard_Engine_Healthy_2 is   --

     function Data return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Engine_Healthy_2_Inboard;
        return Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Rec.FRAME_40_Disc_Word_5.Engine_Healthy_2_Inboard;
     end Data;

     function Is_Valid return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Validity_Rec.FRAME_120_Disc_Word_5;
        return Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_40_BLK0_Validity_Rec.FRAME_40_Disc_Word_5;
```

File: CTP_A350_Io_Engine_Data_Dpkg.STB (continued)

```
     end Is_Valid;

end Inboard_Engine_Healthy_2;

package body Inboard_Throttle_Lever_Angle_1 is

    function Data return Portable_Types_Pkg.Float_32 is --
    begin
         return 0.0;

    end Data;

    function Is_Valid return Boolean is --
    begin

        return False;

    end Is_Valid;

end Inboard_Throttle_Lever_Angle_1;

package body Inboard_Throttle_Lever_Angle_2 is

    function Data return Portable_Types_Pkg.Float_32 is --
    begin

        return 0.0;

    end Data;

    function Is_Valid return Boolean is --
    begin

        return false;

    end Is_Valid;

end Inboard_Throttle_Lever_Angle_2;

package body Outboard_Engine_Healthy_1 is   --

     function Data return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Engine_Healthy_1
```

```
» _Outboard;
        return TRUE;
     end Data;

     function Is_Valid return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Validity_Rec.FRAME_120_Disc_Word_5;
       return TRUE;
     end Is_Valid;

end Outboard_Engine_Healthy_1;

package body Outboard_Engine_Healthy_2 is   --

     function Data return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Engine_Healthy_2
» _Outboard;
        return TRUE;
     end Data;

     function Is_Valid return Boolean is
     begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Validity_Rec.FRAME_120_Disc_Word_5;
        return TRUE;
     end Is_Valid;

end Outboard_Engine_Healthy_2;

package body Outboard_Throttle_Lever_Angle_1 is --

    function Data return Portable_Types_Pkg.Float_32 is --
    begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK1_Rec.Selected_Tla_1_Outboard;
        return 0.0;
    end Data;

    function Is_Valid return Boolean is --
    begin
        --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK1_Validity_Rec.Selected_Tla_1_Outboard;
        return FALSE;
    end Is_Valid;

end Outboard_Throttle_Lever_Angle_1;
```

```

  package body Outboard_Throttle_Lever_Angle_2 is --

      function Data return Portable_Types_Pkg.Float_32 is --
      begin
          --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK1_Rec.Selected_Tla_2_Outboard;
          return 0.0;
      end Data;

      function Is_Valid return Boolean is --
      begin
          --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK1_Validity_Rec.Selected_Tla_2_Outboard;
          return FALSE;
      end Is_Valid;

  end Outboard_Throttle_Lever_Angle_2;

    package body Flex_Climb_Active is --

    function Data return Boolean is
    begin
      --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Flex_Climb_Active;
      return Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Rec.FRAME_120_Disc_Word_8.Flex_Climb_Active
» ;
    end Data;

    function Is_Valid return Boolean is
    begin
      --|return Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Validity_Rec.FRAME_120_Disc_Word_5;
      return Io_PRIM_1_Sel_Pkg.The_Selected_PRIM_1.all.Io_FRAME_1_120_BLK0_Validity_Rec.FRAME_120_Disc_Word_8;
    end Is_Valid;

  end Flex_Climb_Active;

  package body Data_Select is   --

       function Data (Data1: in Boolean; Valid1: in Boolean; Data2: in Boolean; Valid2: in Boolean) return Boolean is
       begin

         --|return (Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Wing_Anti_Ice or
»  --
         --|        Io_PRIM_Sel_Pkg.The_Selected_PRIM.all.Io_FRAME_120_BLK0_Rec.FRAME_120_Disc_Word_5.Engine_Anti_Ice)
» ;

```

```
         if( (Data1 and Valid1) or (Data2 and Valid2) ) then

           return True;

         else

           return False;

         end if;

       end Data;

  end Data_Select;

end Io_Engine_Data_Dpkg;

```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_GB_DATA.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_BKGND_GET_GB_DATA.STB
--
--    REASONS FOR STUBBING : PROCEDURE  Get_Gb_Data  in Prf_External_Util_Pkg is stubbed out
--    File Name: PRF_BKGND_PKG_GET_GB_DATA.ADA

with Fmcs_Base_Types;             -- common
with Fmcs_Fp_Guid_Btypes;         -- common
with Fmcs_Partition_Data_Pkg;     -- common
with Fprequestrec_Types;          -- shared fmf types
with Perf_Ext_Tpkg;               -- shared fmf types
with Perf_Background_Dpkg;        -- perf
with Perf_Despath_Dpkg;           -- perf
with Perf_Dpkg;                   -- perf
with Perf_Int_Base_Tpkg;          -- perf


with ctp_A350_perf_bkgnd_get_bk_data;

-- Needed for operator visibility
use Fmcs_Fp_Guid_Btypes;

separate (Prf_Bkgnd_Pkg)
procedure Get_Gb_Data is

begin   --  procedure Get_Gb_Data

  Ctp_A350_Perf_Bkgnd_Get_Bk_Data.Get_Gb_Data_Exec := True;

end Get_Gb_Data;
```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_KY_DATA.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_BKGND_GET_KY_DATA.STB
--
--    REASONS FOR STUBBING : PROCEDURE GET_ky_DATA  in Prf_External_Util_Pkg is stubbed out
--    File Name:PRF_BKGND_PKG_GET_KY_DATA.ADA

with Portable_Types_Pkg;          --  common_sw
with Fmcs_Base_Types;             --  common
with Fmcs_Partition_Data_Pkg;     --  common
with Perf_Buffer_Types;           --  gray
with Conversion_Const_Pkg;        --  shared types
with Cdk_Fuel_Weight_Tpkg;        --  shared fmf types
with Cdk_Vert_Tpkg;               --  shared fmf types
with Fprequestrec_Types;          --  shared fmf types
with Perf_Despath_Tpkg;           --  shared fmf types
with Cdk_Vert_Dpkg;               --  shared fmf objects
with Perf_Despath_Dpkg;           --  shared fmf objects
with Perf_Rt_Speeds_Dpkg;         --  shared fmf objects
with Perf_Background_Dpkg;        --  perf
with Perf_Config_Dpkg;            --  perf
with Perf_Dpkg;                   --  perf
with Perf_Integration_Dpkg;       --  perf
with Perf_Int_Base_Tpkg;          --  perf

with Ctp_A350_Perf_Bkgnd_Get_Bk_Data;

-- Packages used to obtain operator visibility
use Cdk_Fuel_Weight_Tpkg;
use Cdk_Vert_Tpkg;
use Conversion_Const_Pkg;
use Fmcs_Base_Types;
use Fprequestrec_Types;
use Perf_Int_Base_Tpkg;
use Portable_Types_Pkg;

separate (Prf_Bkgnd_Pkg)
procedure Get_Ky_Data is


begin     --  Procedure Prf_Bkgnd_Pkg.Get_Ky_Data
```

```
    43 |     43 |
    44 |     44 |   Ctp_A350_Perf_Bkgnd_Get_Bk_Data.Get_Ky_Data_Exec := True;
    45 |     45 |
    46 |     46 | end Get_Ky_Data;
```

Mode: All Lines

File: CTP_A350_PERF_BKGND_GET_PB_DATA.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_BKGND_GET_PB_DATA.STB
--
--    REASONS FOR STUBBING : PROCEDURE  Get_Pb_Data  in Prf_External_Util_Pkg is stubbed out

--    File Name: PRF_BKGND_PKG_GET_PB_DATA.ADA

with Portable_Types_Pkg;         -- common sw
with Fmcs_Base_Types;            -- common
with Base_Domain_Services_Tpkg;  -- common
with Io_Interface_Tpkg;          -- common
with Fprequestrec_Types;         -- shared fmf types
with Perf_Buffer_Types;          -- shared fmf types
with Perf_Ext_Tpkg;              -- shared fmf types
with Takeoff_Alt_Types;          -- shared fmf types
with Perf_Ads_Interface_Dpkg;    -- shared fmf objects
with Perf_Ads_Dpkg;              -- perf
with Perf_Background_Dpkg;       -- perf
with Perf_Dpkg;                  -- perf
with Perf_Int_Base_Tpkg;         -- perf
with ctp_A350_perf_bkgnd_get_bk_data;

-- Needed for operator visibility
use Fmcs_Base_Types;
use Base_Domain_Services_Tpkg;
use Io_Interface_Tpkg;
use Fprequestrec_Types;
use Perf_Buffer_Types;
use Perf_Ext_Tpkg;
use Perf_Int_Base_Tpkg;
use Portable_Types_Pkg;

separate (Prf_Bkgnd_Pkg)
procedure Get_Pb_Data is

begin  --  Procedure Prf_Bkgnd_Pkg.Get_Pb_Data

  Ctp_A350_Perf_Bkgnd_Get_Bk_Data.Get_Pb_Data_Exec := True;

end Get_Pb_Data;
```

Mode: All Lines

File: CTP_A350_PERF_BUFFER.STB

```
--
--    STUB File
--
--     CTP_A350_PERF_BUFFER.STB
--
--    REASONS FOR STUBBING :  PROCEDURE Getperfleg in Perf_Buffer is stubbed out
--

--
-- File Name: perf_buffer.ada
--

with Portable_Types_Pkg;        -- common sw
with Apex_Types_Pkg;            -- common
with Apex_Partition_Pkg;        -- common
with Bite_Fault_Recovery_Tpkg;  -- common
with Bite_Recover_Gpkg;         -- common
with Fmcs_Base_Types;           -- common
with Base_Domain_Services_Tpkg; -- common
with Io_Interface_Tpkg;         -- common
with Lateral_Path_Type_Tpkg;    -- common
with Ndb_Tpkg;                  -- common
with Ops_Data_Retained_Pkg;     -- common
with Perf_Buffer_Types;         -- shared fmf types
with Ctp_A350_Perf_Bkgnd_Get_Bk_data;

use Fmcs_Base_Types;
use Base_Domain_Services_Tpkg;
use Io_Interface_Tpkg;
use Lateral_Path_Type_Tpkg;
use Ndb_Tpkg;
use Portable_Types_Pkg;

package body Perf_Buffer is


  Max_Routes : Perf_Route_Type;

  type Access_Type is (Read, Write);

  -- The following type is used instead of Boolean because HADS does
  -- not handle boolean array indexes correctly.
  type Corruption_Leg_Array is array (Perf_Leg_Type range 1 .. Perf_Leg_Type'Last) of Boolean;
  type Corruption_Array is array (Perf_Process_Val range Perf_Process_Val'First .. Perf_Process_Val'Last) of Corruptio
» n_Leg_Array;

  type Perf_Route_Rec is
    record
      Pb_Data : Perf_Route;
      Perf_Has_Updated_Route : Boolean;
      Writer : Perf_Process_Val;
      Guard : Corruption_Array;
    end record;

  type Perf_Route_Array is array (Perf_Route_Type range 1 .. Perf_Route_Type'Last) of Perf_Route_Rec;
  Perf_Routes : Perf_Route_Array;

  New_Lock_Level : Apex_Partition_Pkg.Lock_Level_Type;
  Comp_Status : Apex_Types_Pkg.Status_Code_Type;

  --
  -- BITE fault code and error subcodes for PDB errors
  --
  Perf_Db_Fault_Code : constant Portable_Types_Pkg.Byte_Type := 29;  -- Fault code designated by BITE
  Pb_Route_Out_Of_Range : constant Portable_Types_Pkg.Byte_Type := 0;

  type Bite_Recover_Rec is
    record
      User : Perf_Process_Val;
      Route : Perf_Route_Type;
      Max_Routes : Perf_Route_Type;
    end record;

  Bite_Data : Bite_Recover_Rec;


  package Call_Bite is new Bite_Recover_Gpkg (Data_Type => Bite_Recover_Rec);


  function Is_Mcdu_Pseudo (Pleg : in Perf_Leg_Type) return Boolean is

  begin
    return ((Pleg = Perf_Buffer_Types.Clb_Spdlim) or else (Pleg = Perf_Buffer_Types.Toc) or else
            (Pleg = Perf_Buffer_Types.Tod1) or else (Pleg = Perf_Buffer_Types.Des_Spdlim) or else
            (Pleg = Perf_Buffer_Types.Decelpt) or else (Pleg in Perf_Buffer_Types.Timemark1 .. Perf_Buffer_Types.Timem
» ark4) or else
```

```
          (Pleg in Perf_Buffer_Types.Stpstart1 .. Perf_Buffer_Types.PossibleStepEnd'Last));
end Is_Mcdu_Pseudo;


function No_Of_Routes return Perf_Route_Type is

begin
  return Max_Routes;
end No_Of_Routes;



procedure Init (No_Of_Routes : in Perf_Route_Type; Clear_Out_Buffers : in Boolean) is

begin

  Max_Routes := No_Of_Routes;

  if Clear_Out_Buffers or else not Ops_Data_Retained_Pkg.Ops_Sram_Valid then

    -- The initialization abomination below is brought to you courtesy of
    -- the inadequacies of the HADS compiler...enjoy.

    for H in 1 .. Perf_Route_Type'Last loop
      for J in Perf_Process_Val'First .. Perf_Process_Val'Last loop
        for K in 1 .. Perf_Leg_Type'Last loop
          Perf_Routes (H).Guard (J) (K) := False;
        end loop;
      end loop;
      Perf_Routes (H).Writer := Fmcs_Fp_Guid_Btypes.No_Valid_Caller;
      Perf_Routes (H).Pb_Data := (others => Init_Perflegrec);
      Perf_Routes (H).Perf_Has_Updated_Route := (False);
    end loop;

  end if;

end Init;


procedure Requestperf (User : in Perf_Process_Val; Route : in Perf_Route_Type; Type_Of_Access : in Access_Type) is

begin
  if not (Route in 1 .. Max_Routes) then
    Bite_Data.User := User;
```

```
      Bite_Data.Route := Route;
      Bite_Data.Max_Routes := Max_Routes;

      Call_Bite.Recover (Bite_Data, (Perf_Db_Fault_Code, Pb_Route_Out_Of_Range),
                         Bite_Fault_Recovery_Tpkg.Record_And_Raise_Exception);
    end if;
    Perf_Routes (Route).Guard (User) := (others => False);
    if Type_Of_Access = Write then
      Perf_Routes (Route).Writer := User;
    end if;
  end Requestperf;



  function Releaseperf (User : in Perf_Process_Val; Route : in Perf_Route_Type; Leg_No : in Perf_Leg_Type := 0) return
»  Boolean is

    All_False : constant Corruption_Leg_Array := (others => False);

  begin
    if User = Perf_Routes (Route).Writer then
      Perf_Routes (Route).Writer := Fmcs_Fp_Guid_Btypes.No_Valid_Caller;
      return True;
    else
      case Leg_No is
        when 0 =>
          if Perf_Routes (Route).Guard (User) = All_False then
            return True;
          else
            return False;
          end if;
        when others =>
          if Perf_Routes (Route).Guard (User) (Leg_No) = False then
            return True;
          else
            return False;
          end if;
      end case;
    end if;
  end Releaseperf;



  function Getperfleg (User : in Perf_Process_Val; Route : in Perf_Route_Type; Leg_No : in Perf_Leg_Type) return Perfl
```

```
» egrec is

    Leg : Perflegrec;
  begin

      Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Getperfleg_EXE := true;
      return Ctp_A350_Perf_Bkgnd_Get_Bk_data.CTP_Perfleg;
  end Getperfleg;



  function Getperfroute (User : in Perf_Process_Val; Route : in Perf_Route_Type) return Perf_Route is

    Rte : Perf_Route;
  begin
    loop
      Requestperf (User, Route, Read);
      Rte := Perf_Routes (Route).Pb_Data;
      exit when Releaseperf (User, Route);
    end loop;
    return Rte;
  end Getperfroute;



  procedure Putperfleg (User : in Perf_Process_Val; Route : in Perf_Route_Type; Leg_No : in Perf_Leg_Type; Leg : in Pe
» rflegrec) is

    Bogus : Boolean;
  begin
    Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level, Comp_Status);
    Requestperf (User, Route, Write);
    Perf_Routes (Route).Pb_Data (Leg_No) := Leg;
    for I in Perf_Process_Val'First .. Perf_Process_Val'Last loop
      Perf_Routes (Route).Guard (I) (Leg_No) := True;
    end loop;
    if ((User = Perf_Bg) or else (User = Perf_Fg) or else (User = Preds_Restart)) and then Is_Mcdu_Pseudo (Leg_No) the
» n
      Perf_Routes (Route).Perf_Has_Updated_Route := True;
    end if;
    Bogus := Releaseperf (User, Route, Leg_No);
    Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level, Comp_Status);
  end Putperfleg;

```

```


procedure Putperfroute (User : in Perf_Process_Val; Route_No : in Perf_Route_Type; Route : in Perf_Route) is

  Bogus : Boolean;
begin
  Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level, Comp_Status);
  Requestperf (User, Route_No, Write);
  Perf_Routes (Route_No).Pb_Data := Route;
  Perf_Routes (Route_No).Guard := (others => (others => True));
  Bogus := Releaseperf (User, Route_No);
  Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level, Comp_Status);
end Putperfroute;


procedure Restart is

begin
  for I in 1 .. Max_Routes loop
    Perf_Routes (I).Writer := Fmcs_Fp_Guid_Btypes.No_Valid_Caller;
  end loop;
end Restart;



function Get_Vert_Seq (Data : Perf_Buffer_Types.Perf_Leg_Type) return Flight_Pln_Hdr_Types.Vrtseqset_Enu is


  Temp : Flight_Pln_Hdr_Types.Vrtseqset_Enu;

begin
  case Data is
    when Perf_Buffer_Types.Strtclb2 =>
      Temp := Flight_Pln_Hdr_Types.Strtclb2;
    when Perf_Buffer_Types.Spdchgpt =>
      Temp := Flight_Pln_Hdr_Types.Spdchgpt;
    when Perf_Buffer_Types.Clb_Spdlim =>
      Temp := Flight_Pln_Hdr_Types.Clbspdlim;
    when Perf_Buffer_Types.Des_Spdlim =>
      Temp := Flight_Pln_Hdr_Types.Desspdlim;
    when Perf_Buffer_Types.Level1 =>
      Temp := Flight_Pln_Hdr_Types.Level1;
    when Perf_Buffer_Types.Toc =>
      Temp := Flight_Pln_Hdr_Types.Toc;
```

File: CTP_A350_PERF_BUFFER.STB (continued)

```
      when Perf_Buffer_Types.Clrncealt =>
        Temp := Flight_Pln_Hdr_Types.Clralt;
      when Perf_Buffer_Types.Predtoalt =>
        Temp := Flight_Pln_Hdr_Types.Altintcp;
      when Perf_Buffer_Types.Stpstart1 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart1;
      when Perf_Buffer_Types.Stpstart2 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart2;
      when Perf_Buffer_Types.Stpstart3 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart3;
      when Perf_Buffer_Types.Stpstart4 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart4;
      when Perf_Buffer_Types.Stpstart5 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart5;
      when Perf_Buffer_Types.Stpstart6 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart6;
      when Perf_Buffer_Types.Stpstart7 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart7;
      when Perf_Buffer_Types.Stpstart8 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart8;
      when Perf_Buffer_Types.Stpstart9 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart9;
      when Perf_Buffer_Types.Stpstart10 =>
        Temp := Flight_Pln_Hdr_Types.Stpstart10;
      when Perf_Buffer_Types.Stepend1 =>
        Temp := Flight_Pln_Hdr_Types.Stepend1;
      when Perf_Buffer_Types.Stepend2 =>
        Temp := Flight_Pln_Hdr_Types.Stepend2;
      when Perf_Buffer_Types.Stepend3 =>
        Temp := Flight_Pln_Hdr_Types.Stepend3;
      when Perf_Buffer_Types.Stepend4 =>
        Temp := Flight_Pln_Hdr_Types.Stepend4;
      when Perf_Buffer_Types.Stepend5 =>
        Temp := Flight_Pln_Hdr_Types.Stepend5;
      when Perf_Buffer_Types.Stepend6 =>
        Temp := Flight_Pln_Hdr_Types.Stepend6;
      when Perf_Buffer_Types.Stepend7 =>
        Temp := Flight_Pln_Hdr_Types.Stepend7;
      when Perf_Buffer_Types.Stepend8 =>
        Temp := Flight_Pln_Hdr_Types.Stepend8;
      when Perf_Buffer_Types.Stepend9 =>
        Temp := Flight_Pln_Hdr_Types.Stepend9;
      when Perf_Buffer_Types.Stepend10 =>
        Temp := Flight_Pln_Hdr_Types.Stepend10;
      when Perf_Buffer_Types.Strtclb1 =>
        Temp := Flight_Pln_Hdr_Types.Strtclb1;
      when Perf_Buffer_Types.Tod1 =>
        Temp := Flight_Pln_Hdr_Types.Tod1;
      when Perf_Buffer_Types.Tod2 =>
        Temp := Flight_Pln_Hdr_Types.Tod2;
      when Perf_Buffer_Types.Intercept1 =>
        Temp := Flight_Pln_Hdr_Types.Intercept1;
      when Perf_Buffer_Types.Intercept2 =>
        Temp := Flight_Pln_Hdr_Types.Intercept;
      when Perf_Buffer_Types.Decelpt =>
        Temp := Flight_Pln_Hdr_Types.Decelpt;
      when Perf_Buffer_Types.Drftdnpt =>
        Temp := Flight_Pln_Hdr_Types.Drftdnpt;
      when Perf_Buffer_Types.Timemark1 =>
        Temp := Flight_Pln_Hdr_Types.Timemark1;
      when Perf_Buffer_Types.Timemark2 =>
        Temp := Flight_Pln_Hdr_Types.Timemark2;
      when Perf_Buffer_Types.Timemark3 =>
        Temp := Flight_Pln_Hdr_Types.Timemark3;
      when Perf_Buffer_Types.Timemark4 =>
        Temp := Flight_Pln_Hdr_Types.Timemark4;
      when Perf_Buffer_Types.Equitime =>
        Temp := Flight_Pln_Hdr_Types.Equitime;
      when Perf_Buffer_Types.Adsttg1 =>
        Temp := Flight_Pln_Hdr_Types.Adsttg1;
      when Perf_Buffer_Types.Adsttg2 =>
        Temp := Flight_Pln_Hdr_Types.Adsttg2;
      when Perf_Buffer_Types.Adsttg3 =>
        Temp := Flight_Pln_Hdr_Types.Adsttg3;
      when Perf_Buffer_Types.Adsttg4 =>
        Temp := Flight_Pln_Hdr_Types.Adsttg4;
      when Perf_Buffer_Types.Adsttg5 =>
        Temp := Flight_Pln_Hdr_Types.Adsttg5;
      when others =>
        Temp := Flight_Pln_Hdr_Types.Predstart;  -- This element not used by Airbus
    end case;

    return Temp;

  end Get_Vert_Seq;



```

```
function Get_Pseudo_Wpt (Data : Flight_Pln_Hdr_Types.Vrtseqset_Enu) return Perf_Buffer_Types.Perf_Leg_Type is


  Temp : Perf_Buffer_Types.Perf_Leg_Type;

begin
  case Data is
    when Flight_Pln_Hdr_Types.Strtclb2 =>
      Temp := Perf_Buffer_Types.Strtclb2;
    when Flight_Pln_Hdr_Types.Spdchgpt =>
      Temp := Perf_Buffer_Types.Spdchgpt;
    when Flight_Pln_Hdr_Types.Clbspdlim =>
      Temp := Perf_Buffer_Types.Clb_Spdlim;
    when Flight_Pln_Hdr_Types.Desspdlim =>
      Temp := Perf_Buffer_Types.Des_Spdlim;
    when Flight_Pln_Hdr_Types.Level1 =>
      Temp := Perf_Buffer_Types.Level1;
    when Flight_Pln_Hdr_Types.Toc =>
      Temp := Perf_Buffer_Types.Toc;
    when Flight_Pln_Hdr_Types.Clralt =>
      Temp := Perf_Buffer_Types.Clrncealt;
    when Flight_Pln_Hdr_Types.Altintcp =>
      Temp := Perf_Buffer_Types.Predtoalt;
    when Flight_Pln_Hdr_Types.Stpstart1 =>
      Temp := Perf_Buffer_Types.Stpstart1;
    when Flight_Pln_Hdr_Types.Stpstart2 =>
      Temp := Perf_Buffer_Types.Stpstart2;
    when Flight_Pln_Hdr_Types.Stpstart3 =>
      Temp := Perf_Buffer_Types.Stpstart3;
    when Flight_Pln_Hdr_Types.Stpstart4 =>
      Temp := Perf_Buffer_Types.Stpstart4;
    when Flight_Pln_Hdr_Types.Stpstart5 =>
      Temp := Perf_Buffer_Types.Stpstart5;
    when Flight_Pln_Hdr_Types.Stpstart6 =>
      Temp := Perf_Buffer_Types.Stpstart6;
    when Flight_Pln_Hdr_Types.Stpstart7 =>
      Temp := Perf_Buffer_Types.Stpstart7;
    when Flight_Pln_Hdr_Types.Stpstart8 =>
      Temp := Perf_Buffer_Types.Stpstart8;
    when Flight_Pln_Hdr_Types.Stpstart9 =>
      Temp := Perf_Buffer_Types.Stpstart9;
    when Flight_Pln_Hdr_Types.Stpstart10 =>
      Temp := Perf_Buffer_Types.Stpstart10;
    when Flight_Pln_Hdr_Types.Stepend1 =>
```

```
        Temp := Perf_Buffer_Types.Stepend1;
      when Flight_Pln_Hdr_Types.Stepend2 =>
        Temp := Perf_Buffer_Types.Stepend2;
      when Flight_Pln_Hdr_Types.Stepend3 =>
        Temp := Perf_Buffer_Types.Stepend3;
      when Flight_Pln_Hdr_Types.Stepend4 =>
        Temp := Perf_Buffer_Types.Stepend4;
      when Flight_Pln_Hdr_Types.Stepend5 =>
        Temp := Perf_Buffer_Types.Stepend5;
      when Flight_Pln_Hdr_Types.Stepend6 =>
        Temp := Perf_Buffer_Types.Stepend6;
      when Flight_Pln_Hdr_Types.Stepend7 =>
        Temp := Perf_Buffer_Types.Stepend7;
      when Flight_Pln_Hdr_Types.Stepend8 =>
        Temp := Perf_Buffer_Types.Stepend8;
      when Flight_Pln_Hdr_Types.Stepend9 =>
        Temp := Perf_Buffer_Types.Stepend9;
      when Flight_Pln_Hdr_Types.Stepend10 =>
        Temp := Perf_Buffer_Types.Stepend10;
      when Flight_Pln_Hdr_Types.Strtclb1 =>
        Temp := Perf_Buffer_Types.Strtclb1;
      when Flight_Pln_Hdr_Types.Tod1 =>
        Temp := Perf_Buffer_Types.Tod1;
      when Flight_Pln_Hdr_Types.Tod2 =>
        Temp := Perf_Buffer_Types.Tod2;
      when Flight_Pln_Hdr_Types.Intercept1 =>
        Temp := Perf_Buffer_Types.Intercept1;
      when Flight_Pln_Hdr_Types.Intercept =>
        Temp := Perf_Buffer_Types.Intercept2;
      when Flight_Pln_Hdr_Types.Decelpt =>
        Temp := Perf_Buffer_Types.Decelpt;
      when Flight_Pln_Hdr_Types.Drftdnpt =>
        Temp := Perf_Buffer_Types.Drftdnpt;
      when Flight_Pln_Hdr_Types.Timemark1 =>
        Temp := Perf_Buffer_Types.Timemark1;
      when Flight_Pln_Hdr_Types.Timemark2 =>
        Temp := Perf_Buffer_Types.Timemark2;
      when Flight_Pln_Hdr_Types.Timemark3 =>
        Temp := Perf_Buffer_Types.Timemark3;
      when Flight_Pln_Hdr_Types.Timemark4 =>
        Temp := Perf_Buffer_Types.Timemark4;
      when Flight_Pln_Hdr_Types.Equitime =>
        Temp := Perf_Buffer_Types.Equitime;
      when Flight_Pln_Hdr_Types.Adsttg1 =>
      Temp := Perf_Buffer_Types.Adsttg1;
    when Flight_Pln_Hdr_Types.Adsttg2 =>
      Temp := Perf_Buffer_Types.Adsttg2;
    when Flight_Pln_Hdr_Types.Adsttg3 =>
      Temp := Perf_Buffer_Types.Adsttg3;
    when Flight_Pln_Hdr_Types.Adsttg4 =>
      Temp := Perf_Buffer_Types.Adsttg4;
    when Flight_Pln_Hdr_Types.Adsttg5 =>
      Temp := Perf_Buffer_Types.Adsttg5;
    when others =>
      Temp := Perf_Buffer_Types.Not_Supported;
  end case;

  return Temp;

end Get_Pseudo_Wpt;



function Perf_Has_Updated_Route (User : in Perf_Process_Val; Route : in Perf_Route_Type) return Boolean is

  Return_Value, Bogus : Boolean;

begin
  Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level, Comp_Status);

  Requestperf (User, Route, Write);
  Return_Value := Perf_Routes (Route).Perf_Has_Updated_Route;
  Perf_Routes (Route).Perf_Has_Updated_Route := False;
  Bogus := Releaseperf (User, Route);

  Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level, Comp_Status);

  return Return_Value;

end Perf_Has_Updated_Route;



procedure Set_Update_Flag (User : in Perf_Process_Val; Route : in Perf_Route_Type) is

  Bogus : Boolean;
begin
  Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level, Comp_Status);
```

File: CTP_A350_PERF_BUFFER.STB (continued)

```
    Requestperf (User, Route, Write);
    Perf_Routes (Route).Perf_Has_Updated_Route := True;
    Bogus := Releaseperf (User, Route);

    Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level, Comp_Status);

  end Set_Update_Flag;

end Perf_Buffer;

```

Mode: All Lines

File: CTP_A350_PERF_CLIMB_AUTODRT.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_CLIMB_AUTODRT.STB
--
--    REASONS FOR STUBBING : function Climb_Autodrt is stubbed out for testing.

--| File Name: Prf_Int_Utils_Climb_Autodrt.ada
--|
--|

with Base_Domain_Services_Tpkg;
with Pdb_Constants;                  --  shared fmf objects
with Pdb_Functional_Interface_Pkg;   --  shared fmf objects

with Cdk_Vert_Dpkg;                  --  shared fmf objects
with Cdk_Entry_Tpkg;                 --  shared types

with Prf_Aeroeng_Pkg;                --  perf
with Perf_Ext_Tpkg;                  --  perf
with Prf_Maxalt_Pkg;                 --  perf
with Portable_Types_Pkg;             --  common sw
with Fpln_Ext_Dpkg;
with Portable_Types_Pkg;             -- shared
with Options_And_Data_Pkg;           -- common
with CTP_A350_PERF_BKGND_GET_BK_DATA;

use CTP_A350_PERF_BKGND_GET_BK_DATA;
use Portable_Types_Pkg;
use Cdk_Entry_Tpkg;
use Options_And_Data_Pkg;

separate (Prf_Int_Utils)

procedure Climb_Autodrt(Takeoff_Gw         : in Portable_Types_Pkg.Float_32;
                        Org_elevation      : in Portable_Types_Pkg.Float_32;
                        Clb_Autodrt        : in out Perf_Ext_Tpkg.Clb_Auto_Derate_Rec;
                        Crzisadev          : in Portable_Types_Pkg.Float_32;
                        Crz_Alt            : in Portable_Types_Pkg.Float_32;
                        Trop_Alt           : in Portable_Types_Pkg.Float_32;
                        Clb_Rec_Max_Alt    : in out Io_Interface_Tpkg.Float_32_Valid.Normal ) is

```

```



   Thr_Breakpt                  : Portable_Types_Pkg.Float_32;      -- Thrust Breaking point
   Dzpflex                      : Portable_Types_Pkg.Float_32;      -- Alt Difference between MCRRA and Rec Max Alt
   Dtflex                       : Portable_Types_Pkg.Float_32;      -- Flex Climb Temp difference
   Max_Clb_Rating_Rec_Alt       : Portable_Types_Pkg.Float_32;      -- Max Climb Rating Recovering Alt(MCRRA)
   Isadev_at_Mcrra              : Portable_Types_Pkg.Float_32;      -- ISADEV at MCRRA (Forecast)
   Wos                          : Portable_Types_Pkg.Float_32;      -- Wash Out Slope (Deg C/foot)
   Woendalt                     : Portable_Types_Pkg.Float_32;      -- Washout end Alt (feet)
   Gwt                          : Portable_Types_Pkg.Float_32;      -- Equal to Takeoff GW accounted for Fuel burned
   Std_Crzisadev                : Portable_Types_Pkg.Float_32;      -- Standard ISA Dev at Cruise Altitude
   K_Dtflex                     : Portable_Types_Pkg.Float_32;      -- PDB Constant
   Isadev                       : Portable_Types_Pkg.Float_32;
   Maximum_Maximum_Alt          : Io_Interface_Tpkg.Float_32_Valid.Normal;  -- Max Max Alt
   Dtflex_Basic                 : Pdb_Functional_Interface_Pkg.Access_Table_Type; -- PDB  value
   Deltaalt                     : Portable_Types_Pkg.Float_32;


procedure Compute_Climb_Rec_Max_Alt  is



 begin -- Procedure Compute_Climb_Rec_Max_Alt

   if Clb_Rec_Max_Alt.Valid then
     Deltaalt := Clb_Rec_Max_Alt.Data - Org_elevation;
   else
     Deltaalt := Pdb_Constants.Hcermaxalt - Org_elevation;
   end if;

   Gwt := Takeoff_Gw -
            Prf_Aeroeng_Pkg.Fuelburned
                     (Clbburn => True, Isadev =>Crzisadev, Gwkg => Takeoff_Gw , Dalt => Deltaalt);

    -- Compute Max Max alt
    Maximum_Maximum_Alt.Data := Prf_Maxalt_Pkg.Calc_Maxmax_Alt (Gwt => Gwt, Isadev => Crzisadev,
                                                                Engout => False, Numengout => 0);
    Maximum_Maximum_Alt.Valid := True;


    ---Compute ADCRMA
    Clb_Rec_Max_Alt.Data :=
         Prf_Maxalt_Pkg.Calc_Rec_Max_Alt
```

File: CTP_A350_PERF_CLIMB_AUTODRT.STB (continued)

```
          (Gwt => Gwt, Isadev => Crzisadev, Maxmax => Maximum_Maximum_Alt.Data);
    Clb_Rec_Max_Alt.Valid := True;

end Compute_Climb_Rec_Max_Alt; -- Procedure Compute_Climb_Rec_Max_Alt

--******************************************************************************************

begin -- Climb_Autodrt

    Clb_Autodrt.Wash_Out_End_Alt := CTP_Woendalt;
    Clb_Autodrt.Wash_Out_Slope := CTP_Wos;
    Clb_Autodrt.Delta_T_Flex := CTP_Dtflex;
    Clb_Autodrt.Is_Valid := True;

end Climb_Autodrt ; -- Procedure Calc_Clb_Autodrt

--******************************************************************************************


```

Mode: All Lines

File: CTP_A350_PERF_FPLN_EXT_DPKG.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_FPLN_EXT_DPKG.STB
--
--    REASONS FOR STUBBING : Package Fpln_Ext_Dpkg is stubbed out to make
--                           Get_Flight_Phase procedure visible for test.

-- File Name: A380_FPLN_EXT_DPKG.ADA

with Fpln_Nonretained_Dpkg;
with Fpln_Resync_Dpkg;
with Fprequestrec_Types;
with Fplnchgtyp_Set_Types;
with Fpln_Retained_Dpkg;
with Ctp_A350_Perf_Bkgnd_Get_Bk_Data;

package body Fpln_Ext_Dpkg is


  procedure Put_Prev_Ppos_Leg_Data (Prev_Ppos_Leg_Data : in Fp_Mini_Ppos_Leg_Type.Mini_Ppos_Leg_Rec) is

  begin
    Fpln_Nonretained_Dpkg.Put_Prev_Ppos_Leg_Data (Prev_Ppos_Leg_Data);
  end Put_Prev_Ppos_Leg_Data;

  procedure Get_Prev_Ppos_Leg_Data (Prev_Ppos_Leg_Data : out Fp_Mini_Ppos_Leg_Type.Mini_Ppos_Leg_Rec) is

  begin
    Fpln_Nonretained_Dpkg.Get_Prev_Ppos_Leg_Data (Prev_Ppos_Leg_Data);
  end Get_Prev_Ppos_Leg_Data;

  procedure Put_Hm_Leg (Fpln : in Fprequestrec_Types.Display_Fp_Type; Leg_Index : in Flight_Pln_Leg_Types.Leg_Index_Ty
» pe) is

  begin
    Fpln_Resync_Dpkg.Put_Hm_Leg (Fpln, Leg_Index);
  end Put_Hm_Leg;

  procedure Get_Hm_Leg (Fpln : in Fprequestrec_Types.Display_Fp_Type; Leg_Index : out Flight_Pln_Leg_Types.Leg_Index_T
» ype) is

```

```
  begin
    Fpln_Resync_Dpkg.Get_Hm_Leg (Fpln, Leg_Index);
  end Get_Hm_Leg;

  procedure Put_Trans_Alt (Fpln : in Fprequestrec_Types.Minor_Fp_Type; Altitude : in Fp_Altitude_Types.Transition_Altitude_Type) is


  begin
    Fpln_Resync_Dpkg.Put_Trans_Alt (Fpln, Altitude);
  end Put_Trans_Alt;

  procedure Get_Trans_Alt (Fpln : in Fprequestrec_Types.Minor_Fp_Type; Altitude : out Fp_Altitude_Types.Transition_Altitude_Type) is


  begin
    Fpln_Resync_Dpkg.Get_Trans_Alt (Fpln, Altitude);
  end Get_Trans_Alt;

  procedure Put_Airport_Elevation (Fpln : in Fprequestrec_Types.Minor_Fp_Type; Elevation : in Fp_Altitude_Types.Associated_Airport_Type) is
  begin
    Fpln_Resync_Dpkg.Put_Airport_Elevation (Fpln, Elevation);
  end Put_Airport_Elevation;
  procedure Get_Airport_Elevation (Fpln : in Fprequestrec_Types.Minor_Fp_Type; Elevation : out Fp_Altitude_Types.Associated_Airport_Type) is
  begin
    Fpln_Resync_Dpkg.Get_Airport_Elevation (Fpln, Elevation);
  end Get_Airport_Elevation;
procedure Put_Def_Accel_Alt (Fpln : in Fprequestrec_Types.All_Major_Fp_Type; Acceleration_Alt : in Takeoff_Alt_Types.Phaserectyp) is


  begin
    Fpln_Resync_Dpkg.Put_Def_Accel_Alt (Fpln, Acceleration_Alt);
  end Put_Def_Accel_Alt;

procedure Get_Def_Accel_Alt (Fpln : in Fprequestrec_Types.All_Major_Fp_Type;
                             Acceleration_Alt : out Takeoff_Alt_Types.Phaserectyp) is


  begin
    Fpln_Resync_Dpkg.Get_Def_Accel_Alt (Fpln, Acceleration_Alt);
```

```
end Get_Def_Accel_Alt;

procedure Put_Cruise_Alt (Fpln : in Fprequestrec_Types.Display_Fp_Type; Altitude : in Io_Interface_Tpkg.Float_32_Val
» id.Normal) is


begin
  Fpln_Resync_Dpkg.Put_Cruise_Alt (Fpln, Altitude);
end Put_Cruise_Alt;

procedure Get_Cruise_Alt (Fpln : in Fprequestrec_Types.Display_Fp_Type; Altitude : out Io_Interface_Tpkg.Float_32_Va
» lid.Normal) is


begin
  Altitude.data := 5.0;
  Altitude.Valid := true;
end Get_Cruise_Alt;

procedure Put_Active_Legs_Match (Fpln : in Fprequestrec_Types.All_Major_Fp_Type; Flag : in Boolean) is

begin
  Fpln_Resync_Dpkg.Put_Active_Legs_Match (Fpln, Flag);
end Put_Active_Legs_Match;

function Active_Legs_Match (Fpln : in Fprequestrec_Types.All_Major_Fp_Type) return Boolean is

  Flag : Boolean;

begin
  Flag := Fpln_Resync_Dpkg.Active_Legs_Match (Fpln);
  return Flag;
end Active_Legs_Match;



procedure Put_Fix_Info_Predictions (Prediction : in Fp_Fpln_Types.Fix_Info_Pred_Type) is


begin
  Fpln_Resync_Dpkg.Put_Fix_Info_Predictions (Prediction);
end Put_Fix_Info_Predictions;

procedure Get_Fix_Info_Predictions (Prediction : out Fp_Fpln_Types.Fix_Info_Pred_Type) is
```

```

begin
  Fpln_Resync_Dpkg.Get_Fix_Info_Predictions (Prediction);
end Get_Fix_Info_Predictions;


procedure Put_Eo_Accel_Alt (Fpln : in Fprequestrec_Types.All_Major_Fp_Type; Accel_Alt : in Takeoff_Alt_Types.Phaserectyp) is

begin
  Fpln_Resync_Dpkg.Put_Eo_Accel_Alt (Fpln, Accel_Alt);
end Put_Eo_Accel_Alt;

procedure Get_Eo_Accel_Alt (Fpln : in Fprequestrec_Types.All_Major_Fp_Type; Accel_Alt : out Takeoff_Alt_Types.Phaserectyp) is

begin
  Fpln_Resync_Dpkg.Get_Eo_Accel_Alt (Fpln, Accel_Alt);
end Get_Eo_Accel_Alt;

procedure Put_Refalt (Fpln : in Fprequestrec_Types.All_Major_Fp_Type; Altitude : in Takeoff_Alt_Types.Phaserectyp) is

begin
  Fpln_Resync_Dpkg.Put_Refalt (Fpln, Altitude);
end Put_Refalt;

procedure Get_Refalt (Fpln : in Fprequestrec_Types.All_Major_Fp_Type; Altitude : out Takeoff_Alt_Types.Phaserectyp) is

begin
  Fpln_Resync_Dpkg.Get_Refalt (Fpln, Altitude);
end Get_Refalt;

procedure Put_Tmpy_Eosid_Exists (Flag : in Boolean) is

begin
  Fpln_Resync_Dpkg.Put_Tmpy_Eosid_Exists (Flag);
end Put_Tmpy_Eosid_Exists;

function Tmpy_Eosid_Exists return Boolean is


  Flag : Boolean;
```

File: CTP_A350_PERF_FPLN_EXT_DPKG.STB (continued)

```

  begin
    Flag := Fpln_Resync_Dpkg.Tmpy_Eosid_Exists;
    return Flag;
  end Tmpy_Eosid_Exists;

  procedure Put_Tmpy_Exists (Flag : in Boolean) is

  begin
    Fpln_Resync_Dpkg.Put_Tmpy_Exists (Flag);
  end Put_Tmpy_Exists;

  function Tmpy_Exists return Boolean is


    Flag : Boolean;

  begin
    Flag := Fpln_Resync_Dpkg.Tmpy_Exists;
    return Flag;
  end Tmpy_Exists;

  procedure Put_Fpln_Chg_Flag_Set (Fpln : in Fprequestrec_Types.All_Major_Fp_Type;
                                   Activation_Leg : in Flight_Pln_Leg_Types.Leg_Index_Type;
                                   Set_Of_Change_Flags : in Chgreqtyp_Set_Pkg.Set_Type) is

  begin
    Fpln_Nonretained_Dpkg.Put_Fpln_Chg_Flag_Set (Fpln, Activation_Leg, Set_Of_Change_Flags);
  end Put_Fpln_Chg_Flag_Set;


  procedure Clear_Fpln_Chg_Set (Fpln : in Fprequestrec_Types.All_Major_Fp_Type) is

  begin
    Fpln_Nonretained_Dpkg.Clear_Fpln_Chg_Set (Fpln);
  end Clear_Fpln_Chg_Set;

procedure Get_Fpln_Chg_Set (Fpln : in Fprequestrec_Types.All_Major_Fp_Type;
                            Change_Flag_Set : out Fplnchgtyp_Set_Types.Fplnchgsettyp) is

  begin
    Fpln_Nonretained_Dpkg.Get_Fpln_Chg_Set (Fpln, Change_Flag_Set);
  end Get_Fpln_Chg_Set;

```

```
procedure Put_Corrected_Clearance_Alt (Altitude : in Io_Interface_Tpkg.Float_32_Valid.Normal) is

begin
  Fpln_Resync_Dpkg.Put_Corrected_Clearance_Alt (Altitude);
end Put_Corrected_Clearance_Alt;

procedure Get_Corrected_Clearance_Alt (Altitude : out Io_Interface_Tpkg.Float_32_Valid.Normal) is

begin
  Fpln_Resync_Dpkg.Get_Corrected_Clearance_Alt (Altitude);
end Get_Corrected_Clearance_Alt;

procedure Put_Flight_Phase (Flight_Phase : in Base_Domain_Services_Tpkg.Flight_Phase_Type) is

begin
  Fpln_Resync_Dpkg.Put_Flight_Phase (Flight_Phase);
end Put_Flight_Phase;

procedure Get_Flight_Phase (Flight_Phase : out Base_Domain_Services_Tpkg.Flight_Phase_Type) is

begin
  flight_phase := Ctp_a350_perf_Bkgnd_Get_Bk_Data.Sync_Flight_phase;
end Get_Flight_Phase;

procedure Put_Def_Thrust_Reduction_Alt (Fpln : in Fprequestrec_Types.All_Major_Fp_Type;
                                        Thrust_Reduction_Alt : in Takeoff_Alt_Types.Phaserectyp) is

begin
  Fpln_Resync_Dpkg.Put_Def_Thrust_Reduction_Alt (Fpln, Thrust_Reduction_Alt);
end Put_Def_Thrust_Reduction_Alt;

procedure Get_Def_Thrust_Reduction_Alt (Fpln : in Fprequestrec_Types.All_Major_Fp_Type;
                                        Thrust_Reduction_Alt : out Takeoff_Alt_Types.Phaserectyp) is

begin
  Fpln_Resync_Dpkg.Get_Def_Thrust_Reduction_Alt (Fpln, Thrust_Reduction_Alt);
end Get_Def_Thrust_Reduction_Alt;


procedure Put_Clearance_Alt (Altitude : in Io_Interface_Tpkg.Float_32_Valid.Normal) is

begin
  Fpln_Resync_Dpkg.Put_Clearance_Alt (Altitude);
end Put_Clearance_Alt;
```

```

  procedure Get_Clearance_Alt (Altitude : out Io_Interface_Tpkg.Float_32_Valid.Normal) is

  begin
    Fpln_Resync_Dpkg.Get_Clearance_Alt (Altitude);
  end Get_Clearance_Alt;

  procedure Set_Tap_Modification_Flag (Flag : in Boolean;
                                       Fpln_Segment : in Fp_Fpln_Types.Segment_Type;
                                       Fpln_Type : in Fprequestrec_Types.Minor_Fp_Type) is

  begin
    Fpln_Resync_Dpkg.Set_Tap_Modification_Flag (Flag, Fpln_Segment, Fpln_Type);
  end Set_Tap_Modification_Flag;

  function Tap_Modification_Flag
              (Fpln_Segment : in Fp_Fpln_Types.Segment_Type; Fpln_Type : in Fprequestrec_Types.Minor_Fp_Type) return B
» oolean is

  begin
    return Fpln_Resync_Dpkg.Tap_Modification_Flag (Fpln_Segment, Fpln_Type);
  end Tap_Modification_Flag;

  procedure Put_Active_Wpt_Sequenced (Flag : in Boolean) is

  begin
    Fpln_Resync_Dpkg.Put_Active_Wpt_Sequenced (Flag);
  end Put_Active_Wpt_Sequenced;

  function Active_Wpt_Sequenced return Boolean is

  begin
    return Fpln_Resync_Dpkg.Active_Wpt_Sequenced;
  end Active_Wpt_Sequenced;


  procedure Put_Actv_Scndry_Shrd_Lnk_Stat (Link_Status : in Fp_Fpln_Types.Actv_Scndry_Shrd_Lnk_Stat_Type;
                                           Fpln : in Fprequestrec_Types.Major_Actorsec_Type := Fprequestrec_Types.Seco
» ndary) is

  begin
    Fpln_Resync_Dpkg.Put_Actv_Scndry_Shrd_Lnk_Stat (Link_Status, Fpln);
  end Put_Actv_Scndry_Shrd_Lnk_Stat;

```

```
function Actv_Scndry_Shrd_Lnk_Stat(Fpln : in Fprequestrec_Types.Major_Actorsec_Type := Fprequestrec_Types.Secondary)
 return Fp_Fpln_Types.Actv_Scndry_Shrd_Lnk_Stat_Type is

begin
  return Fpln_Resync_Dpkg.Actv_Scndry_Shrd_Lnk_Stat(Fpln);
end Actv_Scndry_Shrd_Lnk_Stat;

procedure Put_Sec_Fpln_From_Init_Uplink (Sec_Fpln_From_Init_Uplink : in Boolean;
                                         Fpln : in Fprequestrec_Types.Major_Actorsec_Type := Fprequestrec_Types.Seco
» ndary) is

begin
  Fpln_Resync_Dpkg.Put_Sec_Fpln_From_Init_Uplink (Sec_Fpln_From_Init_Uplink, Fpln);
end Put_Sec_Fpln_From_Init_Uplink;

function Sec_Fpln_From_Init_Uplink (Fpln : in Fprequestrec_Types.Major_Actorsec_Type := Fprequestrec_Types.Secondary
» )
return Boolean is

begin
  return Fpln_Resync_Dpkg.Sec_Fpln_From_Init_Uplink(Fpln);
end Sec_Fpln_From_Init_Uplink;

function Get_Noise_Data ( Flight_Plan : in Fprequestrec_Types.Major_Fp_Type ) return Takeoff_Alt_Types.NoiseAbateRec
»  is

begin
  return Fpln_Resync_Dpkg.Get_Noise_Data ( Flight_Plan );
end Get_Noise_Data;

procedure Put_Noise_Data ( Flight_Plan : in Fprequestrec_Types.Major_Fp_Type;
                           NoiseData   : in Takeoff_Alt_Types.NoiseAbateRec ) is

begin
  Fpln_Resync_Dpkg.Put_Noise_Data ( Flight_Plan, NoiseData );
end Put_Noise_Data;

function  Req_Will_Create_Or_Modify_Tmpy_Fpln ( Fpln_Type      : in Fprequestrec_Types.Minor_Fp_Type;
                                                Fpln_Request   : in Fprequestrec_Types.Fplnreqtyp) return Boolean is

begin
  return Fpln_Resync_Dpkg.Req_Will_Create_Or_Modify_Tmpy_Fpln ( Fpln_Type, Fpln_Request );
end Req_Will_Create_Or_Modify_Tmpy_Fpln;

```

```
procedure Put_Tmpy_Ppos_Hold (Temporary_Ppos_Hold : in Boolean) is

begin
  Fpln_Resync_Dpkg.Put_Tmpy_Ppos_Hold (Temporary_Ppos_Hold);
end Put_Tmpy_Ppos_Hold;

function Tmpy_Ppos_Hold return Boolean is
begin
  return Fpln_Resync_Dpkg.Tmpy_Ppos_Hold;
end Tmpy_Ppos_Hold;

procedure Put_RNP_AR_Resync_Check_Status (Flag : in Boolean) is
begin
  Fpln_Retained_Dpkg.Put_RNP_AR_Resync_Check_Status(Flag) ;
end Put_RNP_AR_Resync_Check_Status;

procedure Get_RNP_AR_Resync_Check_Status (Flag : out Boolean) is

begin
  Fpln_Retained_Dpkg.Get_RNP_AR_Resync_Check_Status (Flag);
end Get_RNP_AR_Resync_Check_Status;


procedure Put_Fms_Fpln_Revision (Fms_Fpln_Revision : in Fmcs_Base_Types.Boolean_Valid.Normal) is

begin
  Fpln_Nonretained_Dpkg.Put_Fms_Fpln_Revision(Fms_Fpln_Revision) ;
end Put_Fms_Fpln_Revision ;


function  Fms_Fpln_Revision return Fmcs_Base_Types.Boolean_Valid.Normal is

begin
  return Fpln_Nonretained_Dpkg.Fms_Fpln_Revision;
end  Fms_Fpln_Revision ;


procedure Put_Fpln_Up_To_Date (Fpln_Up_To_Date : in Fmcs_Base_Types.Boolean_Valid.Normal) is

begin
  Fpln_Nonretained_Dpkg.Put_Fpln_Up_To_Date(Fpln_Up_To_Date) ;
end Put_Fpln_Up_To_Date ;


```

```
  function Fpln_Up_To_Date return Fmcs_Base_Types.Boolean_Valid.Normal is

  begin
    return Fpln_Nonretained_Dpkg.Fpln_Up_To_Date;
  end Fpln_Up_To_Date ;
end Fpln_Ext_Dpkg;

```

Mode: All Lines

File: CTP_A350_PERF_GET_AC_CONFIG.STB

```
--
--   Stub File
--
--   CTP_A350_PERF_GET_AC_CONFIG.STB
--
--    REASONS FOR STUBBING :  Procedure Get_Ac_Config is stubbed out
--    File Name: PRF_ACSTATE_PKG_GET_AC_CONFIG.ADA


with Perf_Config_Dpkg;                --  perf int objects
with Portable_Types_Pkg;              --  common types
use Portable_Types_Pkg;               --  common types
with Fmcs_Base_Types;
with Base_Domain_Services_Tpkg;
with Io_Interface_Tpkg;
with Lateral_Path_Type_Tpkg;
with Ndb_Tpkg;
use Fmcs_Base_Types;
use Base_Domain_Services_Tpkg;
use Io_Interface_Tpkg;
use Lateral_Path_Type_Tpkg;
use Ndb_Tpkg;

separate (Prf_Acstate_Pkg)
procedure Get_Ac_Config (Alt : in Portable_Types_Pkg.Float_32;
                         Gwt : in Portable_Types_Pkg.Float_32;
                         Cas : in Portable_Types_Pkg.Float_32;
                         Cas_Valid : in Boolean;
                         Engout : in Boolean;
                         Numengout : in Portable_Types_Pkg.Integer_32;
                         Fltphase : in Base_Domain_Services_Tpkg.Flight_Phase_Type;
                         Config : in out Perf_Ext_Tpkg.Configtyp) is


  Tofspd : Portable_Types_Pkg.Float_32;
  Tosspd : Portable_Types_Pkg.Float_32;


begin      --  Procedure Get_Ac_Config



```

File: CTP_A350_PERF_GET_AC_CONFIG.STB (continued)

```
    Config :=0;



end Get_Ac_Config;
```

Mode: All Lines

File: CTP_A350_PERF_GET_STATE_PKG.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_GET_STATE_PKG.STB
--
--    REASONS FOR STUBBING : PROCEDURE  Perf_Get_State_Pkg.Get_State stubbed out to simplify testing.
--    File Name: PERF_GET_STATE_PKG.ADA

with Ac_Position_Types;
with Base_Domain_Services_Tpkg;
with Io_Interface_Tpkg;
with Navigation_Data;
with Portable_Types_Pkg;
with Perf_Background_Dpkg;
with CTP_A350_PERF_BKGND_GET_BK_DATA;
use Portable_Types_Pkg;


package body Perf_Get_State_Pkg is




  procedure Get_State (Curacalt : in out Portable_Types_Pkg.Float_32;
                       Curacaltval : in out Boolean;
                       Curacposn : in out Ac_Position_Types.Lat_Lon_32_Valid.Normal;
                       Truetrk : in out Portable_Types_Pkg.Float_32;
                       Truetrkval : in out Boolean;
                       Vgrnd : in out Portable_Types_Pkg.Float_32;
                       Vgrndval : in out Boolean;
                       Windbrg : in out Portable_Types_Pkg.Float_32;
                       Windmag : in out Portable_Types_Pkg.Float_32;
                       Windval : in out Boolean) is


begin

Curacalt                               := CTP_A350_PERF_BKGND_GET_BK_DATA.CTP_Psacalt;
Perf_Background_Dpkg.Pcacposn.Data.Lat := 150.0;
Perf_Background_Dpkg.Pcacposn.Data.Lon := 120.0;
Perf_Background_Dpkg.Pcacposn.Valid    := true;
Perf_Background_Dpkg.Pstruetrack       := 0.1;
```

File: CTP_A350_PERF_GET_STATE_PKG.STB (continued)

```
Perf_Background_Dpkg.Pswindbrg         := 200.0;
Perf_Background_Dpkg.Pswindmag         := 100.0;
Perf_Background_Dpkg.Pswindval         := true;
Perf_Background_Dpkg.Psacalt           := 100.0;
Perf_Background_Dpkg.Psacaltv          := True;
Perf_Background_Dpkg.Pstruetrkv        := True;
Perf_Background_Dpkg.Psvgrnd           := 1.0;
Perf_Background_Dpkg.Psvgrndval        := True;

end Get_State;

end Perf_Get_State_Pkg;
```

Mode: All Lines

File: CTP_A350_PERF_IO_FMS_AIRCRAF.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_IO_FMS_AIRCRAF.STB
--
--    REASONS FOR STUBBING : PROCEDURE Puthetadel in Prf_External_Util_Pkg is stubbed out to aid the execution of this
»  CTP.
--    File Name: A3850_IO_FMS_AIRCRAFT_STATE_DPKG.ADA

-- common packages
with Math_Rad_Pkg;            -- common
with Portable_Types_Pkg;      -- common sw
with CTP_A350_PERF_BKGND_GET_BK_DATA;
-- use clauses
use Math_Rad_Pkg;
use Portable_Types_Pkg;


package body Io_Fms_Aircraft_State_Dpkg is



   --Variables
   Airborne_Dat : Boolean := False;
   Airborne_Val : Boolean := False;

   function Is_Airborne return Boolean is


    pragma EXTERNAL_NAME (Is_Airborne, "_Io_Is_Airborne");
    pragma Required( Is_Airborne );

    begin

        if CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_status = true then
           Airborne_Dat := CTP_A350_PERF_BKGND_GET_BK_DATA.Airborne_valid;
        end if;
        return Airborne_Dat;

    end Is_Airborne;

    function Airborne_Is_Valid return Boolean is


    pragma EXTERNAL_NAME (Airborne_Is_Valid, "_Io_Airborne_Is_Valid");
    pragma Required( Airborne_Is_Valid );

    begin

        return Airborne_Val;

    end Airborne_Is_Valid;

    -- put

    procedure Set_Is_Airborne (Value : in Boolean) is



    begin

        Airborne_Dat := Value;

    end Set_Is_Airborne;

    procedure Set_Airborne_Is_Valid (Value : in Boolean) is



    begin

        Airborne_Val := Value;

    end Set_Airborne_Is_Valid;



end Io_Fms_Aircraft_State_Dpkg;

```

Mode: All Lines

File: CTP_A350_PERF_PERF_EXT_DESPATH.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_PERF_EXT_DESPATH.STB
--
--    REASONS FOR STUBBING : PROCEDURE  Pgvdespath  in Perf_Ext_Despath is stubbed out

--   File Name: perf_ext_despath.ada
--

with Airbus_Lgbm;                --  shared types
with Apex_Types_Pkg;             --  common
with Fmcs_Base_Types;            --  common
with Base_Domain_Services_Tpkg;  --  common
with Io_Interface_Tpkg;          --  common
with Lateral_Path_Type_Tpkg;     --  common
with Ndb_Tpkg;                   --  common
with Fprequestrec_Types;         --  shared types
with Ops_Data_Retained_Pkg;      --  common
with Portable_Types_Pkg;         --  common
with Prf_Fp_Conv_Util_Pkg;
with ctp_A350_perf_bkgnd_get_bk_data;

use Fprequestrec_Types;
use Portable_Types_Pkg;

package body Perf_Ext_Despath is


  -- Local types
  type Storage_Record is
    --|  @FIELD:  Vga_Rec
    --|  @DESCRIPTION:  Record type that will hold one VGA point
    --|  @COMMENTS:  N/A

    record

      Pgvdespath : Perf_Despath_Tpkg.Despthrecord;
      --|  @FIELD:  Pgvdespath
      --|  @DESCRIPTION:  Theoretical Descent Profile record

      Pgvlvlnocstr : Perf_Despath_Tpkg.Lvlsegarr;
    --|  @FIELD:  Pgvlvlnocstr
    --|  @DESCRIPTION: An array of booleans, representing every predicted flight plan,
    --|                with the boolean indicating a level altitude not due to an alt cstr.
    --|                Set true if there is level altitude without alt constraint.
    Pgvnewdespth : Boolean;
    --|  @FIELD:  Pgvnewdespth
    --|  @DESCRIPTION:  Descent path change flag.  Set true if the descent path changes.

  end record;

type Storage_Record_Type is array (Fprequestrec_Types.Active .. Fprequestrec_Types.Temporary) of Storage_Record;

-- Local variables
Data_Storage : Storage_Record_Type;

New_Lock_Level : Apex_Partition_Pkg.Lock_Level_Type;
Status : Apex_Types_Pkg.Status_Code_Type;


procedure Initialize (Init_Type : in Apex_Partition_Pkg.Operating_Mode_Type) is

begin

  -- no Initialization identified at this time
  null;

end Initialize;



procedure Invalidate_Pgvdespath (Fpln : in Fprequestrec_Types.Minor_Actorsec_Type := Airbus_Lgbm.Actprimary) is


  Route : Fprequestrec_Types.Major_Fp_Type;

begin
  Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level, Status);  -- lock

  Route := Prf_Fp_Conv_Util_Pkg.Minor_Fp_To_Major_Fp (Fpln);

  -- Store the data
  Data_Storage (Route).Pgvdespath.Vgavalid := False;
  Data_Storage (Route).Pgvnewdespth := True;

  Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level, Status);   -- unlock
end Invalidate_Pgvdespath;



function Vga_Valid (Fpln : in Fprequestrec_Types.Minor_Actorsec_Type := Airbus_Lgbm.Actprimary) return Boolean is


  Route : Fprequestrec_Types.Major_Fp_Type;

begin
  Route := Prf_Fp_Conv_Util_Pkg.Minor_Fp_To_Major_Fp (Fpln);

  return Data_Storage (Route).Pgvdespath.Vgavalid;
end Vga_Valid;



function Pgvdespath (Fpln : in Fprequestrec_Types.Minor_Actorsec_Type := Airbus_Lgbm.Actprimary; Reset_Flag : in Boolean := False)
                    return Perf_Despath_Tpkg.Despthrecord is


  Route : Fprequestrec_Types.Major_Fp_Type;

begin
  Route := Prf_Fp_Conv_Util_Pkg.Minor_Fp_To_Major_Fp (Fpln);
  CTP_A350_PERF_BKGND_GET_BK_DATA.Pgvdespath_Exec := True;

  if Reset_Flag then
    Data_Storage (Route).Pgvnewdespth := False;
  end if;

  return Data_Storage (Route).Pgvdespath;

end Pgvdespath;



procedure Put_Pgvdespath (Fpln : in Fprequestrec_Types.Minor_Actorsec_Type := Airbus_Lgbm.Actprimary;
                          Data : in Perf_Despath_Tpkg.Despthrecord) is

  Route : Fprequestrec_Types.Major_Fp_Type;

  begin

    Route := Prf_Fp_Conv_Util_Pkg.Minor_Fp_To_Major_Fp (Fpln);

    Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level, Status);  -- lock

    -- Store the data
    Data_Storage (Route).Pgvdespath := Data;
    Data_Storage (Route).Pgvdespath.Vgavalid := (Data.Vgaindxlast > 0) and then Data.Vgavalid;

    Data_Storage (Route).Pgvnewdespth := True;

    Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level, Status);   -- unlock
  end Put_Pgvdespath;



  function Despath_Changed (Fpln : in Fprequestrec_Types.Minor_Actorsec_Type := Airbus_Lgbm.Actprimary) return Boolean
»  is


    Route : Fprequestrec_Types.Major_Fp_Type;

  begin
    Route := Prf_Fp_Conv_Util_Pkg.Minor_Fp_To_Major_Fp (Fpln);

    return Data_Storage (Route).Pgvnewdespth;
  end Despath_Changed;

  function TDP_Level_Altitudes_Without_Alt_Constraints (Fpln : in Fprequestrec_Types.Minor_Actorsec_Type := Airbus_Lgb
» m.Actprimary)
                          return Perf_Despath_Tpkg.Lvlsegarr is
    Route : Fprequestrec_Types.Major_Fp_Type;

  begin
    Route := Prf_Fp_Conv_Util_Pkg.Minor_Fp_To_Major_Fp (Fpln);

    return Data_Storage (Route).Pgvlvlnocstr;

  end TDP_Level_Altitudes_Without_Alt_Constraints;

  procedure Put_TDP_Level_Altitudes_Without_Alt_Constraints (Fpln : in Fprequestrec_Types.Minor_Actorsec_Type := Airbu
» s_Lgbm.Actprimary;
                                                             Data : in Perf_Despath_Tpkg.Lvlsegarr) is
    Route : Fprequestrec_Types.Major_Fp_Type;

  begin
    Apex_Partition_Pkg.Lock_Preemption (New_Lock_Level, Status);  -- lock

    Route := Prf_Fp_Conv_Util_Pkg.Minor_Fp_To_Major_Fp (Fpln);

    -- Store the data
    Data_Storage (Route).Pgvlvlnocstr := Data;

    Apex_Partition_Pkg.Unlock_Preemption (New_Lock_Level, Status);   -- unlock

  end Put_TDP_Level_Altitudes_Without_Alt_Constraints;

end Perf_Ext_Despath;

```

Mode: All Lines

File: CTP_A350_PERF_PUTHETADEL.STB

```
--
--    STUB File
--
--    CTP_A350_PERF_PUTHETADEL.STB
--
--    REASONS FOR STUBBING : PROCEDURE Puthetadel in Prf_External_Util_Pkg is stubbed out to aid the execution of this
»  CTP.
--
--    Source File Name: PRF_EXTERNAL_UTIL_PKG_PUTHETADEL.ADA
--
-- common packages
with Math_Rad_Pkg;            -- common
with Portable_Types_Pkg;      -- common sw

-- use clauses
use Math_Rad_Pkg;
use Portable_Types_Pkg;


separate (Prf_External_Util_Pkg)
procedure Puthetadel (Theta : out Portable_Types_Pkg.Float_32;
                      Thetadev : out Portable_Types_Pkg.Float_32;
                      Delta_Ratio : out Portable_Types_Pkg.Float_32;
                      Altitude : in Portable_Types_Pkg.Float_32;
                      Isadev : in Portable_Types_Pkg.Float_32;
                      Tropoalt : in Portable_Types_Pkg.Float_32) is


---- ************************************************************************
---- *             LOCAL CONSTANTS
---- ************************************************************************

  Minimum_Alt : constant := -1000.0;              --  Minimum altitude (which could never happen)



-- ************************************************************************
-- *             LOCAL VARIABLES
-- ************************************************************************

  Isatemp : Portable_Types_Pkg.Float_32;          --  Local ISA temperature
  Altitude_In : Portable_Types_Pkg.Float_32;      --  Altitude passed in, limited within the min/max range
```

```



begin  -- Prf_External_Util_Pkg.Puthetadel
--  Altitude_In := Radian_Utilities_Pkg.Urlim (Altitude, Minimum_Alt, Pdb_Constants.Hcermaxalt);
--
--  if (Altitude_In < Shared_Const_Pkg.Default_Tropopause_Alt) then
--    --  Below standard tropopause
--    Delta_Ratio := (1.0 - Shared_Const_Pkg.Lpsratecon * Altitude_In) ** Shared_Const_Pkg.K1Con;
--
--  else
--    --  At or above standard tropopause
--    Delta_Ratio := 10.0 ** (Shared_Const_Pkg.K2Con - (Altitude_In / Shared_Const_Pkg.K3Con));
--  end if;
--
--  --  CDU tropopause altitude
--  if (Altitude_In < Tropoalt) then
--    Isatemp := Shared_Const_Pkg.Isat0Con * (1.0 - Shared_Const_Pkg.Lpsratecon * Altitude_In);
--
--  else
--    Isatemp := Shared_Const_Pkg.Isat0Con * (1.0 - Shared_Const_Pkg.Lpsratecon * Tropoalt);
--  end if;
--
--  Theta := (Isatemp + Isadev) / Shared_Const_Pkg.Isat0Con;
--  Thetadev := Isadev / Shared_Const_Pkg.Isat0Con;

    NULL;

end Puthetadel;
```

Mode: All Lines

File: CTP_A350_PERF_SPEED_LIMIT_TO_ENVELOPE.STB

```
--
--    STUB File
--
--     CTP_A350_PERF_SPEED_LIMIT_TO_ENVELOPE.STB
--
--    REASONS FOR STUBBING :  PROCEDURE Limit_To_Envelope in Prf_External_Util_Pkg is stubbed out

--    File Name :PRF_SPEED_PKG_LIMIT_TO_ENVELOPE.ADA
--
with Fmcs_Base_Types;                   -- common
with Pdb_Functional_Interface_Pkg;      -- common
with Portable_Types_Pkg;                -- common
with Perfspeedtyp_Types;                -- shared fmf types
with Perf_Ext_Tpkg;                     -- shared fmf types
with Ctp_A350_Perf_Bkgnd_Get_Bk_data;
with Perfspeedtyp_Types;                -- shared fmf types
with Perf_Database_Dpkg;                -- shared fmf objects
with Perf_Dpkg;                         -- shared fmf objects
with Perf_Retained_Dpkg;                -- shared fmf objects
with Perf_Rt_Speeds_Dpkg;               -- shared fmf objects
with Perf_Config_Dpkg;
with Perf_Int_Base_Tpkg;                -- perf
with Takeoff_Alt_Types;

use Fmcs_Base_Types;
use Perf_Ext_Tpkg;
use Perf_Int_Base_Tpkg;
use Portable_Types_Pkg;

separate (Prf_Speed_Pkg)
procedure Limit_To_Envelope (Vmax : in out Portable_Types_Pkg.Float_32;
                             Vmin : in out Portable_Types_Pkg.Float_32;
                             Maxmintyp : in Fmcs_Base_Types.Speed_Type;
                             Alt : in Portable_Types_Pkg.Float_32;
                             Gwt : in Portable_Types_Pkg.Float_32;
                             Fltphase : in Base_Domain_Services_Tpkg.Flight_Phase_Type;
                             Isadev : in Portable_Types_Pkg.Float_32;
                             Tropoalt : in Portable_Types_Pkg.Float_32;
                             Config : in Perf_Ext_Tpkg.Configtyp;
                             Press_Ratio : in Portable_Types_Pkg.Float_32;
                             Theta : in Portable_Types_Pkg.Float_32;
                             Engout : in Boolean;
```

File: CTP_A350_PERF_SPEED_LIMIT_TO_ENVELOPE.STB (continued)

```
                             Speedmode : in Perf_Int_Base_Tpkg.Spdmodetyp;
                             Numengout : in Portable_Types_Pkg.Integer_32;
                             Landing_Config : in Perf_Ext_Tpkg.Configtyp;
                             Fpln : in Perf_Ext_Tpkg.Pred_Major_Fp_Type) is

  Appr_Spd : Perfspeedtyp_Types.Apprspeedtyp;   --  System Vapp speed
  Dm : Portable_Types_Pkg.Float_32;             --  Max operating delta for Mach
  Dv : Portable_Types_Pkg.Float_32;             --  Max operating delta for Cas
  Greendot : Portable_Types_Pkg.Float_32;       --  Greendot CAS (Kt)
  Maxcas : Portable_Types_Pkg.Float_32;         --  Maximum CAS
  Maxmach : Portable_Types_Pkg.Float_32;        --  Maximum MACH
  Mincas : Portable_Types_Pkg.Float_32;         --  Minimum CAS
  Next_Config : Perf_Ext_Tpkg.Configtyp;        --  Next configuration in sequence (not used)
  Pdb_Data : Pdb_Functional_Interface_Pkg.Access_Table_Type;  -- Variable to store table lookups
  Stdisadev : Portable_Types_Pkg.Float_32;      --  Standard isa-deviation
  Vapp : Portable_Types_Pkg.Float_32;           --  Approach speed
  Vfe : Portable_Types_Pkg.Float_32;            --  Maximum CAS for flaps and slats extended
  Vls : Portable_Types_Pkg.Float_32;            --  Minimum selectable CAS for a given aircraft configuration (Kt)
  Vman : Portable_Types_Pkg.Float_32;           --  MANOEUVER SPEED FOR CONFIGURATION
  Vxbuf02 : Portable_Types_Pkg.Float_32;        --  Maximum Mach with 0.2 G buffet margin
  Vxthr : Portable_Types_Pkg.Float_32;          --  Maximum Mach due to thrust


begin  --  procedure Prf_Speed_Pkg.Limit_To_Envelope

  Ctp_A350_Perf_Bkgnd_Get_Bk_Data.Envelope_Exec := True;

end Limit_To_Envelope;
```

Mode: All Lines

File: CTP_A350_IO_ADC_DPKG.STB

```
--
--    STUB File
--
--    CTP_A350_IO_ADC_DPKG.STB
--
--    REASONS FOR STUBBING : function  Io_Adc_Dpkg.Cas.Data, Io_Adc_Dpkg.Mach.Data, Io_Adc_Dpkg.Tas.Data are stubbed o
» ut

with Fmcs_Partition_Data_Pkg;
with Apex_Partition_Pkg;
with Io_Adc_Private_Dpkg;
with Io_Adc_Sel_Pkg;
with Io_Adc_In_Pkg;

with IO_FG_FM_INTERNAL_DPKG;


use Apex_Partition_Pkg;
use Io_Adc_Private_Dpkg;
use Io_Adc_In_Pkg;

package body Io_Adc_Dpkg is



  package body Adc_Valid is
  --!


    function Data return Boolean is
    begin
     -- return ( (not Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Rec.Adc_Discretes.Adr_Fault) and then
     --          (Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Adc_Discretes) );
     return ( (not Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Adc_Discretes.Adr_Fault) and then
         (Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Adc_Discretes) );
    end Data;

    function Is_Valid return Boolean is
    begin
     -- return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Adc_Discretes );
     return Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Adc_Discretes;
    end Is_Valid;

end Adc_Valid;


package body Altitude is
--!


  function Data return Float_32 is
  begin
   -- return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Rec.Altitude );
    return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Altitude );
  end Data;

  function Is_Valid return Boolean is
  begin
   -- return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Altitude );
   return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Altitude );
  end Is_Valid;

end Altitude;

package body Baro_Corr_Alt_Internal is
--!

  function Data return Float_32 is
  begin
  --  return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Rec.Baro_Corr_Alt_Internal_1 );
    return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Baro_Corr_Alt_Internal_1 );
  end Data;

  function Is_Valid return Boolean is
  begin
   -- return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Baro_Corr_Alt_Internal_1 );
    return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Baro_Corr_Alt_Internal_1 );
  end Is_Valid;

end Baro_Corr_Alt_Internal;


package body Baro_Correction_Hg_1 is
--!

  function Data return Float_32 is
  begin
    --return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Rec.Baro_Correction_Hg_1 );
    return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Baro_Correction_Hg_1 );
  end Data;

  function Is_Valid return Boolean is
  begin
   -- return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Baro_Correction_Hg_1 );
   return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Baro_Correction_Hg_1 );
  end Is_Valid;

end Baro_Correction_Hg_1;


package body Baro_Correction_Mb_1 is
--!

  function Data return Float_32 is
  begin
   -- return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Rec.Baro_Correction_Mb_1 );
   return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Baro_Correction_Mb_1 );
  end Data;

  function Is_Valid return Boolean is
  begin
   -- return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Baro_Correction_Mb_1 );
    return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Baro_Correction_Mb_1 );
  end Is_Valid;

end Baro_Correction_Mb_1;

package body Cas is
--!

  function Data return Float_32 is
  begin
      return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Cas );
  end Data;

  function Is_Valid return Boolean is
  begin
     -- return ( Io_Fg_Fm_Internal_Dpkg.PRIM_Cas.Is_Valid or
     --          Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Cas );
       return ( Io_Fg_Fm_Internal_Dpkg.PRIM_Cas.Is_Valid or
               Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Cas );
  end Is_Valid;

end Cas;

package body Mach is
--!

  function Data return Float_32 is
  begin
      return Float_32(Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Mach);
  end Data;

  function Is_Valid return Boolean is
  begin
    --  return ( Io_Fg_Fm_Internal_Dpkg.PRIM_Mach.Is_Valid or
    --           Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Mach );
    return ( Io_Fg_Fm_Internal_Dpkg.PRIM_Mach.Is_Valid or
       Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Mach );
  end Is_Valid;

end Mach;

package body Sat is
--!

  function Data return Float_32 is
  begin
  --  return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Rec.Sat );
    return Float_32( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Sat );
  end Data;

  function Is_Valid return Boolean is
  begin
   -- return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Sat );
   return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Sat );
  end Is_Valid;

end Sat;

package body Tas is
--!

  function Data return Float_32 is
```

```
    begin
      return Float_32(Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Rec.Tas);
    end Data;

    function Is_Valid return Boolean is
    begin
    --  return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_Adr_Msg_Validity_Rec.Tas );
     return ( Io_Adc_Sel_Pkg.The_Selected_Adc.all.Io_ADIRU_ADR_AFDX_MSG_Validity_Rec.Tas );
    end Is_Valid;

  end Tas;



end Io_Adc_Dpkg;
```