FMS E-Review 2005 Cover Sheet
08/18/11

INSPECTION COMPLETE

Load: MD11_922_TST

Review ID:	17011.01	Life Cycle:	High-Level Test Procedures	FAREA:	TESTS	DO-178 Level:	B
Review Type:	Standard Meeting	ACM Project:	FMS2000			Rework Effort (hours):	0.5
Produced:	HTS - Shanghai	ACM Subproject:	MDXX			Closure Effort (hours):	0.5

Review: Date | Time	May 20, 2013	15:00	Meeting Duration:	0.5	Moderator Closure → ✔
Review Location:	Moderator Cubicle		# Review Participants:	3	APPROVED By Leon Jiang at 3:31 pm, Jun 08, 2013
Conference Room:	N/A		Date Complete:	6/8/13	Audit: Stamp Here
Telephone | Participant Code:	N/A	N/A	Review Status: (result of review)	Revise & Review Again	
			Some Work Deferred:		Version(s) Unchanged:

Work Product Type(s): MD11

Supporting Material(s) / Comments:

Trace Data, Software Test, Component Test	VG_MDXX_ALT_TGT_PFD.SRD, 6

Producer Employer:	Shanghai (FMS)	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
17011.01	CTP_MD11_VG_SEL_ALT_TGT.TDF	2	33	test case	5
17011.01	CTP_MD11_VG_SEL_ALT_TGT.ZIP	4	6	undefined	7
17011.01		2	40	anchors	2

Participants

Name	Function (discipline)/ Responsibility	Review Time (hours)	Role in review	Attend	Will Close	Signature check complete
Dun, Qing	S/W Test	1.0	Producer	☒		✔ REVIEWED By E800858 at 5:00 pm, Apr 07, 2013
jiang, guanlan	S/W Test	2.0	Moderator	☒	☒	✔ REVIEWED By Leon Jiang at 3:29 pm, Jun 08, 2013
			Oversight			
Xiong, Sarah	S/W Test	0.5	Reviewer	☒		✔ REVIEWED By Zhou Xiong at 2:22 pm, Jun 08, 2013
Qiong.zhou	PDQE		Auditor			

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
Linda Arce2	PDQE		Auditor			

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

Change Category: PROBLEM SCR No.: P 17011.01
SCR Status: SEC SCR Status Date: 19-MAY-2013
Originator: Deanna Meloche Date Originated: 17-MAY-2013
Affected Area: VGUIDE Customer No.:
Assignee: Dun, Qing Priority: 3
Verification Assignee: Jiang Guan Lan
Found in Configuration: MDXX_SRD_REV_007 Hardcopy Attachment: None
Target Configuration: MD11_922_TST

Planned Impact: Test
Found During: HI Other

SCR Copied To: < None Entered >

SCR Copied From: < None Entered >

SCR Reissued To: < None Entered >

SCR Reissued From: < None Entered >

Title: Alt Tgt in Des - Requirements Clarification

Description:

VG_MDXX_ALT_TGT_PFD.SRD anchor 7006 needs clarification.
7004 states the altitude target shall be the VG Ref Altitude while not on path.
7006 states the altitude target shall be the max of VG Target Altitude and Descent Target Altitude while on path.
7006 is wrong, there is no such thing as "VG Target Altitude", it should be VG Reference Altitude.
Using VG Target Altitude in 7006 is confusing and should be changed.

SRB Reviewed By: O'Connor, Michael Date: 17-MAY-2013

Analysis/Solution:

<17-May-2013>[E800858-HTSC]
Updated CTP_MD11_VG_SEL_ALT_TGT for MD11 on bulid 922_604.
TDF(Gen=2)
1. Renumber the TESTID as the same TESTID
2. Added TCs 32-33 to test the anchor VGUIDE_SRD_7006 as per SCR 17011.00
3. Modify TC 15 to test the anchor VGUIDE_SRD_7006 as per SCR 17011.00
ZIP(Gen=4)
1. Update Rst, Rpt file.
2. Added DSP file

Elements Affected:

Doc.	Element	Generation
TEST	CTP_MD11_VG_SEL_ALT_TGT.TDF	2
TEST	CTP_MD11_VG_SEL_ALT_TGT.ZIP	4

ASSIGNEE: Dun, Qing Date: 20-MAY-2013
VERIFIER: Date:
CCB COORDINATOR: Date:

Closure Category: Fixed/Added Duplicate SCR No.: 00000.00

Project Status: Done
Addendum:
Visual Review Info:
Cert/Sys Concern: 0 - CC1/S1 None/Level 1
Cust Notification: 0 - CN1 None
Expected Inservice: 0 - I1 Not expected to occur in-service
Flight Deck Effect: 0 - FD1 None
Non Customer Input: 0 - P1 None
Workload Wrkaround: 0 - W1 No Workaround Necessary
Must Fix: 0 - MF1 Use Score
Score/Meeting:
Score Comment:
Closed in Config.: MD11_922_TST

Component Test Procedure (CTP) Checklist **(CTP_CHECKLIST_WORD.doc 10/24/07)**		
	ACM Project:	FMS2000
	ACM Sub-Project:	MDXX
	SCR Number:	17011.01
	Affected Area:	TESTS

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~~ (*.DPN)
    - *.DRV
    - ~~*.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

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 41-43, there is no C++ code or C++ stub code.

NO.
For item 37, 45, refer review comments.
For item 14, multiple anchors in TDF.

Mode: All Lines
Left base folder: D:\MD11\17011\CTP_MD11_VG_SEL_ALT_TGT\old
Right base folder: D:\MD11\17011\CTP_MD11_VG_SEL_ALT_TGT

File: CTP_MD11_VG_SEL_ALT_TGT.BAT

1	1	ECHO OFF
2	2	REM
3	3	REM BAT File
4	4	REM
5	5	REM CTP_MD11_VG_SEL_ALT_TGT.BAT
6	6	REM
7	7	ECHO ON
8	8	ECHO Building Library
9	9	%build_lib% FM
10	10	ECHO Compiling
11	11	%acomp% CTP_MD11_VG_SEL_ALT_TGT.DRV
12	12	ECHO Linking
13	13	%alink% CTP_MD11_VG_SEL_ALT_TGT
14	14	ECHO Running
15	15	%runtgs% CTP_MD11_VG_SEL_ALT_TGT y
16	16	ECHO CTP_MD11_VG_SEL_ALT_TGT Completed Execution

File: CTP_MD11_VG_SEL_ALT_TGT.DPN

1	1	## Coverage file for CTP_MD11_VG_SEL_ALT_TGT
2	2	## the following packages, procedures and functions
3	3	## are covered by this test.
4	4	## All names must be in uppercase.
5	5	VG_EIS_ALTITUDE_TARGET_PKG
6	6	VG_EIS_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGETS
7	7	VG_FCC_ALTITUDE_TARGET_PKG
8	8	VG_FCC_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGET
9	9	##

File: CTP_MD11_VG_SEL_ALT_TGT.DRV

```
--                  PEGASUS COMPONENT TEST DRIVER
--
--  COMPONENT: VG_ALTITUDE_TARGET_PKG
--
--
package Test_VG_SELECT_ALT_TARGET is

-- Global test variables go here
-------------------------------------------------------------------------
-- This variable added in order to call VG_FCC_ALTITUDE_TARGET_PKG.ADA
-- to check that the vertical guidance altitude target is in fact the
-- vertical guidance reference altitude
-------------------------------------------------------------------------
test_for_FCC_call : Boolean;


end Test_VG_SELECT_ALT_TARGET;
--
--
--
with VG_EIS_ALTITUDE_TARGET_PKG;
with VG_FCC_ALTITUDE_TARGET_PKG;
with Test_VG_SELECT_ALT_TARGET;
with Vg_Ac_Unique_Pkg;

use  Test_VG_SELECT_ALT_TARGET;

 procedure ctp_MD11_VG_SEL_ALT_TGT_d is


 begin

VG_EIS_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGETS;


 if (Test_VG_SELECT_ALT_TARGET.test_for_FCC_call) then
   VG_FCC_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGET;
 end if;


 <<testend>>  NULL;

 end ctp_MD11_VG_SEL_ALT_TGT_d;
```

File: CTP_MD11_VG_SEL_ALT_TGT.DSP

```
##
##    DSP File
##
##    CTP_MD11_VG_SEL_ALT_TGT.DSP
##

     1. REASON FOR FAILURES OF TEST CASES

        N/A

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

     2. REASON FOR NOT GETTING 100% COVERAGE

SubUnit: VG_EIS_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGETS
[235-46 JMPF]Decision ending on line 115 ONLY taken.
  .  115             if Vg_Ac_Unique_Pkg.Altitude_Bug_Allowed then
  *  116               Vg_Outputs_Int_Dpkg.Nxtalttgtv := (Vg_Only_Int_Dpkg.Destgtalt
» /= Vg_Inputs_Int_Dpkg.Minimum_Certified_Altitude);

[235-50 LABEL]Lines 117 - 118 not executed.
     117             else
     118               Vg_Outputs_Int_Dpkg.Nxtalttgtv := False;


       TCH (Test Coverage Hole) Excuse :<one_path_possible>
                                        Analysis of the code has shown that only one p
» ath of this branch
                                        can be taken as the necessary conditions for t
» he other path are logically impossible.

        Vg_Ac_Unique_Pkg.Altitude_Bug_Allowed always return ture so that only one pat
» h of this branch can be taken.


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

     3. ANY OTHER ISSUES

      N/A
```

File: CTP_MD11_VG_SEL_ALT_TGT.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 23 17:07:08 China Standard Time 2012~~
   8                                 Thu Apr 25 15:33:26 China Standard Time 2013
9  9
10 10     Test Coverage Analyzer (TCA)  V6.13 CLASS A ps4082880-121
11            ~~    Win32 Host: WinNT 5.1 Build 2600  UserID: E801455  Node: CH71DT7QL763X (Intel Pen~~
   ~~» tPro Model 42 Step 7)~~
12            ~~    Current Dir: D:\Exercise and task\VG\New Folder\CTP_MD11_VG_SEL_ALT_TGT~~
   11                Win32 Host: WinNT 5.1 Build 2600  UserID: E800858  Node: CH71DT34Z873X (Intel Pen
   » tPro Model 42 Step 7)
   12                Current Dir: D:\MD11\17011\CTP_MD11_VG_SEL_ALT_TGT
13 13
14 14 ------------------------------------------------------------------------------
15            ~~TCA invoked Tue Oct 23 17:07:06 China Standard Time 2012 with command line:~~
   15 TCA invoked Thu Apr 25 15:33:24 China Standard Time 2013 with command line:
16 16    TCA.exe -TABS -r CTP_MD11_VG_SEL_ALT_TGT.rpt -s -type 3 -p ...
17 17    CTP_MD11_VG_SEL_ALT_TGT_d.pth -x CTP_MD11_VG_SEL_ALT_TGT.xin -c ...
18 18    CTP_MD11_VG_SEL_ALT_TGT.cul --ignore=i,g,h
19 19 ------------------------------------------------------------------------------
20 20 Expanded command line:
21 21    TCA.exe -TABS -r CTP_MD11_VG_SEL_ALT_TGT.rpt -s -type 3 -p ...
22 22    CTP_MD11_VG_SEL_ALT_TGT_d.pth -x CTP_MD11_VG_SEL_ALT_TGT.xin -c ...
23 23    CTP_MD11_VG_SEL_ALT_TGT.cul --ignore=i,g,h
24 24 ------------------------------------------------------------------------------
25 25
26 26
27 27 Test Coverage Type: 3
28 28
29 29 Report File Name  : CTP_MD11_VG_SEL_ALT_TGT.rpt
30 30
31 31 Paths file(s) :
32 32
33            ~~  (P01) CTP_MD11_VG_SEL_ALT_TGT_d.pth   Tue Oct 23 17:06:36 2012~~
   33           (P01) CTP_MD11_VG_SEL_ALT_TGT_d.pth   Thu Apr 25 15:32:39 2013
34 34               HADS-290x0 (PC/Windows NT) Ada Compiler, Version 2.9, PS4078711-104
35 35               HADS-290x0 (PC/Windows NT) Ada Compiler, Version 2.9.61, PS4082845-107
36 36               Honeywell 29K Assembler, V3.6, PS4072677-112
   37               Honeywell 29K Assembler, V2.4, PS4072677-105
37 38               HADS-290x0 (PC/Windows NT) Ada Linker, Version 2.9.61, PS4082846-109
38 39
39 40 XInfo file(s)    Test Date    Test Platform:
40 41
41 42   (P01) CTP_MD11_VG_SEL_ALT_TGT_d.pth
42            ~~       (X01) CTP_MD11_VG_SEL_ALT_TGT.xin   Tue Oct 23 17:06:44 2012   ISS TCA Xinfo,~~
   ~~» Platform V7.02.04~~
   43           (X01) CTP_MD11_VG_SEL_ALT_TGT.xin   Thu Apr 25 15:32:51 2013   ISS TCA Xinfo,
   »  Platform V7.02.04
43 44
44 45 ------------------------------------------------------------------------------
45 46       Compilation                    Test Coverage Statistics       Warnings
46 47        Unit Name               Total Decision Cond Statemnt Block  Mixed Bool
47 48 ------------------------------ ----------------------------------- ----------
48 49 VG_FCC_ALTITUDE_TARGET_PKG -
49            ~~  .SELECT_ALTITUDE_TARGET          91.7     75.0    n/a    100.0  100.0      1    0~~
```

File: CTP_MD11_VG_SEL_ALT_TGT.rpt (continued)

~~3/4 n/a 5/5 47/47~~

.SELECT_ALTITUDE_TARGET 100.0 100.0 n/a 100.0 100.0 1 0
4/4 n/a 5/5 50/50

VG_FCC_ALTITUDE_TARGET_PKG 100.0 NONE n/a NONE 100.0 0 0
0/0 n/a 0/0 2/2

VG_EIS_ALTITUDE_TARGET_PKG -
.SELECT_ALTITUDE_TARGETS 96.9 95.0 n/a 97.3 98.6 0 0
19/20 n/a 36/37 68/69

VG_EIS_ALTITUDE_TARGET_PKG 100.0 NONE n/a NONE 100.0 0 0
0/0 n/a 0/0 2/2

~~Total Percentages 91.7 n/a 97.6 99.2~~
~~Totals 22/24 n/a 41/42 119/120~~
~~Total Coverage 96.2~~

Total Percentages 95.8 n/a 97.6 99.2
Totals 23/24 n/a 41/42 122/123
Total Coverage 97.5

□

****

Test Coverage Analyzer (TCA) Version 6.13 CLASS A

****

Coverage Type: 3

Date of report / Report name :

~~Tue Oct 23 17:07:08 2012 CTP_MD11_VG_SEL_ALT_TGT.rpt~~

Thu Apr 25 15:33:26 2013 CTP_MD11_VG_SEL_ALT_TGT.rpt

Current Directory:

~~D:\Exercise and task\VG\New Folder\CTP_MD11_VG_SEL_ALT_TGT~~

D:\MD11\17011\CTP_MD11_VG_SEL_ALT_TGT

Paths file(s) :

~~(P01) CTP_MD11_VG_SEL_ALT_TGT_d.pth Tue Oct 23 17:06:36 2012~~

(P01) CTP_MD11_VG_SEL_ALT_TGT_d.pth Thu Apr 25 15:32:39 2013

HADS-290x0 (PC/Windows NT) Ada Compiler, Version 2.9, PS4078711-104
HADS-290x0 (PC/Windows NT) Ada Compiler, Version 2.9.61, PS4082845-107
Honeywell 29K Assembler, V3.6, PS4072677-112

Honeywell 29K Assembler, V2.4, PS4072677-105

HADS-290x0 (PC/Windows NT) Ada Linker, Version 2.9.61, PS4082846-109

XInfo file(s) Test Date Test Platform:

(P01) CTP_MD11_VG_SEL_ALT_TGT_d.pth

~~(X01) CTP_MD11_VG_SEL_ALT_TGT.xin Tue Oct 23 17:06:44 2012 ISS TCA Xinfo, Platform V7.02.04~~

(X01) CTP_MD11_VG_SEL_ALT_TGT.xin Thu Apr 25 15:32:51 2013 ISS TCA Xinfo, Platform V7.02.04

Source file(s) :

File: CTP_MD11_VG_SEL_ALT_TGT.rpt (continued)

```
 98  100
 99        ~~   C:\BUILDS\md11\922_408\SRC_922_408\fm\VG_EIS_ALTITUDE_TARGET_PKG.ADA~~
100        ~~   C:\BUILDS\md11\922_408\SRC_922_408\fm\VG_FCC_ALTITUDE_TARGET_PKG.ADA~~
     101      C:\BUILDS\md11\922_604\SRC_922_604\fm\VG_EIS_ALTITUDE_TARGET_PKG.ADA
     102      C:\BUILDS\md11\922_604\SRC_922_604\fm\VG_FCC_ALTITUDE_TARGET_PKG.ADA
101  103
102  104 Total Coverage statistics :
103  105
104        ~~   TYPE 3,  96.2%~~
     106      TYPE 3,  97.5%
105  107
106  108
107  109 ************************************************************************
108  110                       Source Report Legend Key
109  111            (Legend Key may be suppressed by -k option)
110  112
111  113 Coverage messages preceding source code lines are annotated with
112  114 object code block tags of the form [x-y BLOCKTYPE]. For example,
113  115    [263-17 JMPT] is a block tag for the 17th block of the 263rd unit
114  116                  in the pathsfile and is a jump true block.
115  117 This block tag annotation is intended to be used as a reference to
116  118 the object code level block report (.tcb) generated with the -B option.
117  119 Each object code block is labeled with a unique block tag.
118  120
119  121 Each line of source code may be prefixed by one of the following
120  122 indicators:
121  123    . = source line completely or partially executed
122  124    * = source line shown ONLY to clarify previous source lines and
123  125        is NOT actually part of the uncovered source TCA is reporting on
124  126    Note that no prefix indicates source line was not executed
125  127
126  128
127  129 ************************************************************************
128  130
129  131 Compilation Unit / Source file :
130  132
131  133         VG_FCC_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGET
132        ~~         C:\BUILDS\md11\922_408\SRC_922_408\fm\VG_FCC_ALTITUDE_TARGET_PKG.ADA~~
     134         C:\BUILDS\md11\922_604\SRC_922_604\fm\VG_FCC_ALTITUDE_TARGET_PKG.ADA
133  135
134  136 Coverage statistics :
135  137
136        ~~         TYPE 3,  91.7%~~
     138         TYPE 3, 100.0%
137  139
138  140                              Executed         Total
139        ~~         Decision Paths          3             4~~
     141         Decision Paths          4             4
140  142         Condition Paths       n/a           n/a
141  143         Statements              5             5
142        ~~         Blocks                 47            47~~
     144         Blocks                 50            50
143  145
144  146
145        ~~.....................................................................~~
146        ~~SubUnit: VG_FCC_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGET~~
147        ~~[231-11 JMPT]Decision ending on line 59 ONLY taken.~~
148        ~~   .   59              (abs (Vg_Only_Int_Dpkg.Vgrcfalt - Vg_Outputs_Int_Dpkg.Vgalttgt)~~
           ~~» <= 100.0)) then~~
149        ~~   *   60~~
```

File: CTP_MD11_VG_SEL_ALT_TGT.rpt (continued)

```
                *    61          Vg_Outputs_Int_Dpkg.Vgalttgt := Vg_Only_Int_Dpkg.Vgrefalt;

*****************************************************************************

Compilation Unit / Source file :

        VG_FCC_ALTITUDE_TARGET_PKG
        C:\BUILDS\md11\922_408\SRC_922_408\fm\VG_FCC_ALTITUDE_TARGET_PKG.ADA
        C:\BUILDS\md11\922_604\SRC_922_604\fm\VG_FCC_ALTITUDE_TARGET_PKG.ADA

Coverage statistics :

        TYPE 3, 100.0%

                            Executed         Total
        Decision Paths             0             0
        Condition Paths          n/a           n/a
        Statements                 0             0
        Blocks                     2             2



*****************************************************************************

Compilation Unit / Source file :

        VG_EIS_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGETS
        C:\BUILDS\md11\922_408\SRC_922_408\fm\VG_EIS_ALTITUDE_TARGET_PKG.ADA
        C:\BUILDS\md11\922_604\SRC_922_604\fm\VG_EIS_ALTITUDE_TARGET_PKG.ADA

Coverage statistics :

        TYPE 3,  96.9%

                            Executed         Total
        Decision Paths            19            20
        Condition Paths          n/a           n/a
        Statements                36            37
        Blocks                    68            69



.............................................................................
SubUnit: VG_EIS_ALTITUDE_TARGET_PKG.SELECT_ALTITUDE_TARGETS
[235-46 JMPF]Decision ending on line 115 ONLY taken.
[4206-46 JMPF]Decision ending on line 115 ONLY taken.
  .  115             if Vg_Ac_Unique_Pkg.Altitude_Bug_Allowed then
  *  116               Vg_Outputs_Int_Dpkg.Nxtalttgtv := (Vg_Only_Int_Dpkg.Destgtalt
» /= Vg_Inputs_Int_Dpkg.Minimum_Certified_Altitude);

[235-50 LABEL]Lines 117 - 118 not executed.
[4206-50 LABEL]Lines 117 - 118 not executed.
     117             else
     118               Vg_Outputs_Int_Dpkg.Nxtalttgtv := False;



*****************************************************************************
```

File: CTP_MD11_VG_SEL_ALT_TGT.rpt (continued)

205	199	Compilation Unit / Source file :
206	200	
207	201	VG_EIS_ALTITUDE_TARGET_PKG
208		~~C:\BUILDS\md11\922_408\SRC_922_408\fm\VG_EIS_ALTITUDE_TARGET_PKG.ADA~~
	202	C:\BUILDS\md11\922_604\SRC_922_604\fm\VG_EIS_ALTITUDE_TARGET_PKG.ADA
209	203	
210	204	Coverage statistics :
211	205	
212	206	TYPE 3, 100.0%
213	207	
214	208	Executed Total
215	209	Decision Paths 0 0
216	210	Condition Paths n/a n/a
217	211	Statements 0 0
218	212	Blocks 2 2
219	213	
220	214	
221	215	
222	216	********** End of Report **********

File: CTP_MD11_VG_SEL_ALT_TGT.rst

```
                                RESULTS FILE

*******************************************************************************
                            Test Results Summary

          Percentage of Comparisons Passed    : 100.0000%

          Total Number of Comparisons Failed  : 0
          Total Number of Unknown Comparisons : 0
          Total Number of Comparisons Passed  : 87
          Total Number of Comparisons         : 87
          Total Number of Test Cases Included : 31
          Total Number of Comparisons Passed  : 89
          Total Number of Comparisons         : 89
          Total Number of Test Cases Included : 33

          Test Complete



*******************************************************************************

Test Start Time: Oct 23 17:06:45 2012
Test Start Time: Apr 25 15:32:52 2013

FILE:                   CTP_MD11_VG_SEL_ALT_TGT.TDF

TITLE:                  Vertical Guidance Select Altitude Target

SOURCE CONFIGURATION:   ISS

AUTHOR:                 Keith Scherrer

TRANSLATED BY:          Gerald J. Molczyk / David M. Hall    DATE: 06-Jun-97

MODIFIED BY:            Dennis Kenney / David M. Hall / Christian Sarraf

PACKAGE:                VG_ALTITUDE_TARGET_PKG

PROCEDURE:              SELECT_ALT_TARGET

PURPOSE:                This test is to verify that the Next Altitude Target
                        and Altitude Tape Target are correctly selected for
                        each operational scenario.

-- -- ------------------------------------------------------------------------
MODIFIED BY            :  DUN, QING
DATE                   :  25 APR 2013
CHECKED UNDER SCR      :  17011.01
BUILD  USED            :  MD11_922_604
SRD NAME & VERSION     :  VG_MDXX_ALT_TGT_PFD.SRD, 6
MODIFICATIONS          :  1. Renumber the TESTID as the same TESTID
                          2. Added TCs 32-33 to test the anchor VGUIDE_SRD_7006 as p
» er SCR 17011.00
                          3. Modify TC 15 to test the anchor VGUIDE_SRD_7006 as per
» SCR 17011.00
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
        55 -- -- ------------------------------------------------------------------------
44      56
45      57 -- -- -- NOTES:
46      58 -- -- --  (1) Original Script:
47      59 -- -- --       Element Name:     VGSELALTTGT.PAS
48      60 -- -- --       Last Modified:    16-AUG-1994 10:46:38.64
49      61 -- -- --       Author Name:      Keith Scherrer
50      62 -- -- --
51      63 -- -- --  (2) Revision History:
52      64 -- -- --          Element Name:   CTP_VG_SELECT_ALT_TARGET.TDF
53      65 -- -- --          Translated:     06-JUN-1997
54      66 -- -- --          Translators:    Gerald J. Molczyk / David M. Hall
55      67 -- -- --          NOTES:          Ported from scaled Pascal to Ada. Revised for the
56      68 -- -- --                          MD11 program.
57      69 -- -- --
58      70 -- -- --  (3) Revision History:
59      71 -- -- --          Element Name:   CTP_717_VG_SELECT_ALT_TGT.TDF
60      72 -- -- --          Last Modified:  24-SEP-1998
61      73 -- -- --          Modified by::   Dennis Kenney / David M. Hall / Christian Sarraf
62      74 -- -- --          NOTES:          Revised for the MDXX program.
63      75 -- -- --
64      76 -- -- --  (4) Revision History:
65      77 -- -- --          Element Name:   CTP_MD10_VG_SEL_ALT_TGT.TDF
66      78 -- -- --          Last Modified:  24-JUL-1999
67      79 -- -- --          Modified by:    Christian Sarraf
68      80 -- -- --          NOTES:          Revised for the MD10 program.
69      81 -- -- --
70      82 -- -- --  (5) Revision History:
71      83 -- -- --          Element Name:   CTP_717C2_VG_SEL_ALT_TGT.TDF
72      84 -- -- --          Last Modified:  20-Feb-2000
73      85 -- -- --          Modified by:    Christian Sarraf
74      86 -- -- --          NOTES:          Revised for the 717C2 program.
75      87 -- -- --
76      88 -- -- --  (6) Revision History:
77      89 -- -- --          Element Name:   CTP_MD11_VG_SEL_ALT_TGT.TDF
78      90 -- -- --          Last Modified:  29-Jun-2000
79      91 -- -- --          Modified by:    Christian Sarraf
80      92 -- -- --          NOTES:          Revised for the MD11 program.
81      93
82      94
83      95 TRACEABILITY TO REQUIREMENTS/CODE:
84      96
85      97 -- -- -- ANCHOR  : MD11_VG_TEST_2059
86      98 -- -- -- SOURCE  : VGUIDE_SRD_7000
87      99
88     100 -- -- -- ANCHOR  : MD11_VG_TEST_2057
89     101 -- -- -- SOURCE  : VGUIDE_SRD_7002
90     102
91     103 -- -- -- ANCHOR  : MD11_VG_TEST_2018
92     104 -- -- -- SOURCE  : VGUIDE_SRD_7003
93     105
94     106 -- -- -- ANCHOR  : MD11_VG_TEST_3830
95     107 -- -- -- SOURCE  : VGUIDE_SRD_7004
96     108
97     109 -- -- -- ANCHOR  : MD11_VG_TEST_3831
98     110 -- -- -- SOURCE  : VGUIDE_SRD_7006
99     111
100    112 -- -- -- ANCHOR  : MD11_VG_TEST_2019
101    113 -- -- -- SOURCE  : VGUIDE_SRD_7007
102    114
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

103	115	-- -- -- ANCHOR : MD11_VG_TEST_3832
104	116	-- -- -- SOURCE : VGUIDE_SRD_7008
105	117	
106	118	-- -- -- ANCHOR : MD11_VG_TEST_3833
107	119	-- -- -- SOURCE : VGUIDE_SRD_7009
108	120	
109	121	-- -- -- ANCHOR : MD11_VG_TEST_2020
110	122	-- -- -- SOURCE : VGUIDE_SRD_7010
111	123	
112	124	-- -- -- ANCHOR : MD11_VG_TEST_3834
113	125	-- -- -- SOURCE : VGUIDE_SRD_7011
114	126	
115	127	-- -- -- ANCHOR : MD11_VG_TEST_3835
116	128	-- -- -- SOURCE : VGUIDE_SRD_7012
117	129	
118	130	-- -- -- ANCHOR : MD11_VG_TEST_3836
119	131	-- -- -- SOURCE : VGUIDE_SRD_7013
120	132	
121	133	-- -- -- ANCHOR : MD11_VG_TEST_3837
122	134	-- -- -- SOURCE : VGUIDE_SRD_7015
123	135	
124	136	-- -- -- ANCHOR : MD11_VG_TEST_3838
125	137	-- -- -- SOURCE : VGUIDE_SRD_7017
126	138	
127	139	-- -- -- ANCHOR : MD11_VG_TEST_1178
128	140	-- -- -- SOURCE : VGUIDE_SRD_2902
129	141	
130	142	-- -- -- ANCHOR : MD11_VG_TEST_1104
131	143	-- -- -- SOURCE : VGUIDE_SRD_8005
132	144	
133	145	-- -- -- ANCHOR : MD11_VG_TEST_1278
134	146	-- -- -- SOURCE : VGUIDE_SRD_5205
135	147	
136	148	-- -- -- ANCHOR : MD11_VG_TEST_1202
137	149	-- -- -- SOURCE : VGUIDE_SRD_5206
138	150	
139	151	-- -- -- ANCHOR : MD11_VG_TEST_1357
140	152	-- -- -- SOURCE : VGUIDE_SRD_3041
141	153	
142	154	-- -- -- ANCHOR : MD11_VG_TEST_1303
143	155	-- -- -- SOURCE : VGUIDE_SRD_5304
144	156	
145	157	-- -- -- ANCHOR : MD11_VG_TEST_1417
146	158	-- -- -- SOURCE : VGUIDE_SRD_3026
147	159	
148	160	-- -- -- ANCHOR : MD11_VG_TEST_1403
149	161	-- -- -- SOURCE : VGUIDE_SRD_5618
150	162	
151	163	-- -- -- ANCHOR : MD11_VG_TEST_1513
152	164	-- -- -- SOURCE : VGUIDE_SRD_2837
153	165	
154	166	-- -- -- ANCHOR : MD11_VG_TEST_1503
155	167	-- -- -- SOURCE : VGUIDE_SRD_5655
156	168	
157	169	-- -- -- ANCHOR : MD11_VG_TEST_3282
158	170	-- -- -- SOURCE : VGUIDE_SRD_3072
159	171	
160	172	-- -- -- ANCHOR : MD11_VG_TEST_3283
161	173	-- -- -- SOURCE : VGUIDE_SRD_3103
162	174	

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
163 175 -- -- -- ANCHOR  : MD11_VG_TEST_3284
164 176 -- -- -- SOURCE  : VGUIDE_SRD_3221
165 177
166 178 -- -- -- ANCHOR  : MD11_VG_TEST_3285
167 179 -- -- -- SOURCE  : VGUIDE_SRD_3150
168 180
169 181 -- -- -- ANCHOR  : MD11_VG_TEST_3286
170 182 -- -- -- SOURCE  : VGUIDE_SRD_3190
171 183
172 184 -- -- -- ANCHOR  : MD11_VG_TEST_3287
173 185 -- -- -- SOURCE  : VGUIDE_SRD_2810
174 186
175 187 -- -- -- ANCHOR  : MD11_VG_TEST_3288
176 188 -- -- -- SOURCE  : VGUIDE_SRD_2848
177 189
178 190 -- -- -- ANCHOR  : MD11_VG_TEST_3289
179 191 -- -- -- SOURCE  : VGUIDE_SRD_2891
180 192
181 193 -- -- -- ANCHOR  : MD11_VG_TEST_3899
182 194 -- -- -- SOURCE  : VGUIDE_SRD_8286
183 195
184 196 -- -- -- ANCHOR  : MD11_VG_TEST_3823
185 197 -- -- -- SOURCE  : VGUIDE_SRD_8235
186 198
187 199 -- -- -- ANCHOR  : MD11_VG_TEST_3824
188 200 -- -- -- SOURCE  : VGUIDE_SRD_8201
189 201
190 202 -- -- -- ANCHOR  : MD11_VG_TEST_3825
191 203 -- -- -- SOURCE  : VGUIDE_SRD_8152
192 204
193 205 -- -- -- ANCHOR  : MD11_VG_TEST_3826
194 206 -- -- -- SOURCE  : VGUIDE_SRD_8118
195 207
196 208 -- -- -- ANCHOR  : MD11_VG_TEST_3827
197 209 -- -- -- SOURCE  : VGUIDE_SRD_2840
198 210
199 211 -- -- -- ANCHOR  : MD11_VG_TEST_3828
200 212 -- -- -- SOURCE  : VGUIDE_SRD_5555
201 213
202 214 -- -- -- ANCHOR  : MD11_VG_TEST_3829
203 215 -- -- -- SOURCE  : VGUIDE_SRD_2894
204 216
205 217
206 218
207 219 VERIFY COMPLIANCE WITH SRD SECTION:
208 220
209 221  MD11 Vertical Guidance Altitude Target
210 222
211 223  Vertical Guidance Altitude Target (Airmass Ascent).....10.2.1.3
212 224  Vertical Guidance Altitude Target (Clb Intermediate Level)... 10.2.2.3
213 225  Vertical Guidance Altitude Target (Cruise Level).....10.2.3.3
214 226  Vertical Guidance Altitude Target (Descent Path).....10.2.4.3
215 227  Vertical Guidance Altitude Target (Desc Int Level).....10.2.5.3
216 228  Vertical Guidance Altitude Target (Early Descent).....10.2.6.3
217 229  Vertical Guidance Altitude Target (Late Descent).....10.2.7.3
218 230  Vertical Guidance Altitude Target (Desc Path Overspd).....10.2.8.3
219 231  Vertical Guidance Altitude Target (HM).....10.2.9.3
220 232  Vertical Guidance Altitude Target (Airmass Descent).....10.2.10.3
221 233  Vertical Guidance Altitude Target (EO Takeoff).....10.2.11.3
222 234  Vertical Guidance Altitude Target (EO Takeoff Level Acc).....10.2.12.3
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
223 235  Vertical Guidance Altitude Target (Engine-out Driftdown).....10.2.13.3
224 236
225 237  Altitude Target and Next Altitude Target for Display On The PFD Altitude Tape (10.4.
    » 2)
226 238  (Altitude Target).....10.4.2.1
227 239  (Next Altitude Target).....10.4.2.2
228 240
229 241
230 242
231 243 OVERALL TESTING APPROACH:
232 244
233 245 Tool Used:      Instruction Set Simulator
234 246
235 247 Description:    This test procedure verifies the SRD requirements for
236 248                 VG_ALTITUDE_TARGET_PKG.SELECT_ALT_TARGET. The Test Generated
237 249                 System (TGS), running under the ISS platform, was chosen to
238 250                 enable automated testing for both structural coverage and
239 251                 testing of the requirements.
240 252
241 253 Setup:          The driver CTP_MD11_VG_SEL_ALT_TGT.DRV is
242 254                 compiled and linked against the current library containing the
243 255                 library under test. Use departmental symbols and logicals to
244 256                 run this test. The minimal files needed to run this test are:
245 257                 CTP_MD11_VG_SEL_ALT_TGT.DRV,
246 258                 CTP_MD11_VG_SEL_ALT_TGT.DPN,
247 259                 CTP_MD11_VG_SEL_ALT_TGT.TDF.
248 260
249 261 Disposition:    TBD
250 262
251 263 -- -- --        BEGIN PROCESSING INCLUDE FILE C:\Program Files\honeywell_eng\TGS_v4_5
    » _2\bin\debug_cmds.inc
252 264 -- -- --        END PROCESSING INCLUDE FILE C:\Program Files\honeywell_eng\TGS_v4_5_2
    » \bin\debug_cmds.inc
253 265 -- -- -- ****************************************************************
254 266 -- -- --                      INITIALIZATION SECTION
255 267 -- -- -- ****************************************************************
256 268
257 269
258 270 CONSTANT
    »                            VALUE
259 271 ------------------------------------------------------------------------------
    » -------------  --------------------------
260 272 FP_DEF_TOL
    »                                       0.0
261 273
262 274
263 275 define symbol AIRMASSASCNT := Opproctyp_Types.AIRMASSASCNT
264 276 define symbol CLBINTLEVEL  := Opproctyp_Types.CLBINTLEVEL
265 277 define symbol EOTAKEOFF    := Opproctyp_Types.EOTAKEOFF
266 278 define symbol EOLEVELACCEL := Opproctyp_Types.EOLEVELACCEL
267 279 define symbol CRZLEVEL     := Opproctyp_Types.CRZLEVEL
268 280 define symbol DESCENTPATH  := Opproctyp_Types.DESCENTPATH
269 281 define symbol DESINTLEVEL  := Opproctyp_Types.DESINTLEVEL
270 282 define symbol LATEDESCENT  := Opproctyp_Types.LATEDESCENT
271 283 define symbol DESPATHOVER  := Opproctyp_Types.DESPATHOVER
272 284 define symbol EARLYDESCENT := Opproctyp_Types.EARLYDESCENT
273 285 define symbol HOLDTOMANUAL := Opproctyp_Types.HOLDTOMANUAL
274 286 define symbol AIRMASSDSCNT := Opproctyp_Types.AIRMASSDSCNT
275 287 define symbol EODRIFTDOWN  := Opproctyp_Types.EODRIFTDOWN
276 288 define symbol PREFLIGHT := Fmcs_Base_Types.PREFLIGHT
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
277 289 define symbol TAKEOFF   := Fmcs_Base_Types.TAKEOFF
278 290 define symbol CLIMB     := Fmcs_Base_Types.CLIMB
279 291 define symbol CRUISE    := Fmcs_Base_Types.CRUISE
280 292 define symbol DESCENT   := Fmcs_Base_Types.DESCENT
281 293 define symbol APPROACH  := Fmcs_Base_Types.Flight_Phase_Type'(Fmcs_Base_Types.APPROAC
      » H)
282 294 define symbol GOAROUND  := Fmcs_Base_Types.GOAROUND
283 295 define symbol DONE      := Fmcs_Base_Types.DONE
284 296 define symbol MASTER := Fmcs_Base_Types.MASTER
285 297 define symbol WINDSHEAR_MAX_THRUST  := Fmcs_Mdxx_Base_Types.WINDSHEAR_MAX_THRUST
286 298 define symbol PITCH_SPEED           := Fmcs_Mdxx_Base_Types.PITCH_SPEED
287 299 define symbol ALT_CAPT_SPEED        := Fmcs_Mdxx_Base_Types.ALT_CAPT_SPEED
288 300 define symbol ALT_CAPT_IDLE_THRUST  := Fmcs_Mdxx_Base_Types.ALT_CAPT_IDLE_THRUST
289 301 define symbol ALT_HOLD_SPEED        := Fmcs_Mdxx_Base_Types.ALT_HOLD_SPEED
290 302 define symbol ALT_HOLD_IDLE_THRUST  := Fmcs_Mdxx_Base_Types.ALT_HOLD_IDLE_THRUST
291 303 define symbol SPEED_IDLE_THRUST     := Fmcs_Mdxx_Base_Types.SPEED_IDLE_THRUST
292 304 define symbol SPEED_MAX_THRUST      := Fmcs_Mdxx_Base_Types.SPEED_MAX_THRUST
293 305 define symbol VS_SPEED              := Fmcs_Mdxx_Base_Types.VS_SPEED
294 306 define symbol ALT_HOLD_MAX_THRUST   := Fmcs_Mdxx_Base_Types.ALT_HOLD_MAX_THRUST
295 307 define symbol ALT_CAPT_MAX_THRUST   := Fmcs_Mdxx_Base_Types.ALT_CAPT_MAX_THRUST
296 308 define symbol TOGA_SPEED_MAX_THRUST := Fmcs_Mdxx_Base_Types.TOGA_SPEED_MAX_THRUST
297 309
298 310
299 311 CONSTANT
      »                            VALUE
300 312 ------------------------------------------------------------------------------
      » -------------  --------------------------
301 313 DBG_TIMEOUT
      »                                      300
302 314
303 315
304 316 TESTID: 1
305 317
306 318 Test Name:   VGSELALT_001
307 319 The altitude and next altitude Target shall be invalid when the guidance/control/annu
      » nciation criteria
308 320 (as defined in 10.1.1) are not satisfied.
309 321 SRD Reference: 10.4.2 b. (VGUIDE_SRD_7000, MD11_VG_TEST_2059)
310 322 Notes: Vertical Guidance Active (Vgactive).  True means all the conditions for allowi
      » ng Vertical Guidance
311 323 to be active are true.  These conditions are explicitly stated in SRD Section 10.1.1.
      » 1b. and comprise
312 324 the guidance process, the control process, and the annunciation process.
313 325
314 326
315 327 INPUT
      »                            VALUE
316 328 ------------------------------------------------------------------------------
      » -------------  --------------------------
317 329 Vg_Inputs_Int_Dpkg.Minimum_Certified_Altitude
      »                                   -1000.0
318 330 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
      »                                    FALSE
319 331 VG_INPUTS_INT_DPKG.AIRBORNE
      »                                     TRUE
320 332 VG_ONLY_INT_DPKG.VGACTIVE
      »                                    FALSE
321 333
322 334
323 335 OUTPUT                                                          EXPECTED
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
»   TOLERANCE              ACTUAL            P/F
----------------------------------------------------  -------------------------------
» -------------  --------------------------  ----
VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                                    FALSE
»         (N/A)                       FALSE  P
VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                                    FALSE
»         (N/A)                       FALSE  P


====> All 2 Comparisons Passed <====


TESTID: 2

Test Name:   VGSELALT_002
Altitude Target
SRD Reference: 10.4.2.1


INPUT
»                           VALUE
-------------------------------------------------------------------------------------
» -------------  --------------------------
Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
»                                     FALSE
VG_ONLY_INT_DPKG.VGACTIVE
»                                      TRUE
FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
»                                    MASTER
VG_HS_DPKG.DATA.FLTPHASE
»                                    CRUISE
VG_INPUTS_INT_DPKG.CRZALT
»                                   25000.0
VG_INPUTS_INT_DPKG.CRZALTVAL
»                                      TRUE
VG_ONLY_INT_DPKG.VGREFALT
»                                   20000.0
VG_OUTPUTS_INT_DPKG.OPPROC
»                               CLBINTLEVEL
VG_OUTPUTS_INT_DPKG.VGALTTGT
»                                   22000.0
VG_OUTPUTS_INT_DPKG.VGALTTGTVL
»                                      TRUE
VG_ONLY_INT_DPKG.NXTCLBTGT
»                                   18000.0
VG_INPUTS_INT_DPKG.ACALT.ALT
»                                   21000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
»                                   21000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
»                                      TRUE


OUTPUT                                                               EXPECTED
»   TOLERANCE              ACTUAL            P/F
----------------------------------------------------  -------------------------------
» -------------  --------------------------  ----
VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                                     TRUE
»         (N/A)                        TRUE  P
VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                                  22000.0
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
      |      |»           0.0                  2.20000E+04  P
  361 |  373 |VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          25000.0
      |      |»           0.0                  2.50000E+04  P
  362 |  374 |VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                            TRUE
      |      |»         (N/A)                        TRUE  P
  363 |  375 |
  364 |  376 |
  365 |  377 |====> All 4 Comparisons Passed <====
  366 |  378 |
  367 |  379 |
  368 |  380 |TESTID: 3
  369 |  381 |
  370 |  382 |Test Name:   VGSELALT_003
  371 |  383 |Altitude Target
  372 |  384 |SRD Reference: 10.4.2.1
  373 |  385 |
  374 |  386 |
  375 |  387 |INPUT
      |      |»                           VALUE
  376 |  388 |-------------------------------------------------------------------------------
      |      |» -------------  --------------------------
  377 |  389 |Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
      |      |»                                    FALSE
  378 |  390 |VG_ONLY_INT_DPKG.VGACTIVE
      |      |»                                     TRUE
  379 |  391 |FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
      |      |»                                   MASTER
  380 |  392 |VG_OUTPUTS_INT_DPKG.OPPROC
      |      |»                               AIRMASSASCNT
  381 |  393 |VG_HS_DPKG.DATA.FLTPHASE
      |      |»                                   CRUISE
  382 |  394 |VG_INPUTS_INT_DPKG.ACALT.ALT
      |      |»                                  21000.0
  383 |  395 |VG_INPUTS_INT_DPKG.CRZALT
      |      |»                                  25000.0
  384 |  396 |VG_INPUTS_INT_DPKG.CRZALTVAL
      |      |»                                     TRUE
  385 |  397 |VG_ONLY_INT_DPKG.VGREFALT
      |      |»                                  20000.0
  386 |  398 |VG_OUTPUTS_INT_DPKG.VGALTTGT
      |      |»                                  22000.0
  387 |  399 |VG_OUTPUTS_INT_DPKG.VGALTTGTVL
      |      |»                                     TRUE
  388 |  400 |VG_ONLY_INT_DPKG.NXTCLBTGT
      |      |»                                  18000.0
  389 |  401 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
      |      |»                                  21000.0
  390 |  402 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
      |      |»                                    FALSE
  391 |  403 |
  392 |  404 |
  393 |  405 |OUTPUT                                                          EXPECTED
      |      |»   TOLERANCE              ACTUAL            P/F
  394 |  406 |-------------------------------------------------  ------------------------------
      |      |» -------------  --------------------------  ----
  395 |  407 |VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                            TRUE
      |      |»         (N/A)                        TRUE  P
  396 |  408 |VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                         22000.0
      |      |»           0.0                  2.20000E+04  P
  397 |  409 |VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          25000.0
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
      |      |» 0.0 2.50000E+04 P
  398 |  410 |VG_OUTPUTS_INT_DPKG.NXTALTTGTV TRUE
      |      |» (N/A) TRUE P
  399 |  411 |
  400 |  412 |
  401 |  413 |====> All 4 Comparisons Passed <====
  402 |  414 |
  403 |  415 |
  404 |  416 |TESTID: 4
  405 |  417 |
  406 |  418 |Test Name:  VGSELALT_004
  407 |  419 |Altitude Target
  408 |  420 |SRD Reference: 10.4.2.1
  409 |  421 |
  410 |  422 |
  411 |  423 |INPUT
      |      |» VALUE
  412 |  424 |--------------------------------------------------------------------------------
      |      |» -------------  --------------------------
  413 |  425 |Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
      |      |» FALSE
  414 |  426 |FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
      |      |» MASTER
  415 |  427 |VG_HS_DPKG.DATA.FLTPHASE
      |      |» TAKEOFF
  416 |  428 |VG_INPUTS_INT_DPKG.ACALT.ALT
      |      |» 21000.0
  417 |  429 |VG_INPUTS_INT_DPKG.CRZALT
      |      |» 25000.0
  418 |  430 |VG_INPUTS_INT_DPKG.CRZALTVAL
      |      |» TRUE
  419 |  431 |VG_ONLY_INT_DPKG.VGREFALT
      |      |» 20000.0
  420 |  432 |VG_OUTPUTS_INT_DPKG.OPPROC
      |      |» CLBINTLEVEL
  421 |  433 |VG_OUTPUTS_INT_DPKG.VGALTTGT
      |      |» 20000.0
  422 |  434 |VG_OUTPUTS_INT_DPKG.VGALTTGTVL
      |      |» TRUE
  423 |  435 |VG_ONLY_INT_DPKG.NXTCLBTGT
      |      |» 18000.0
  424 |  436 |VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE
      |      |» 19000.0
  425 |  437 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
      |      |» 21000.0
  426 |  438 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
      |      |» FALSE
  427 |  439 |
  428 |  440 |
  429 |  441 |OUTPUT EXPECTED
      |      |» TOLERANCE ACTUAL P/F
  430 |  442 |-------------------------------------------------  ------------------------------
      |      |» -------------  --------------------------  ----
  431 |  443 |VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE 19000.0
      |      |» 0.0 1.90000E+04 P
  432 |  444 |VG_OUTPUTS_INT_DPKG.ALTTAPETGT 20000.0
      |      |» 0.0 2.00000E+04 P
  433 |  445 |VG_OUTPUTS_INT_DPKG.NXTALTTGT 18000.0
      |      |» 0.0 1.80000E+04 P
  434 |  446 |VG_OUTPUTS_INT_DPKG.NXTALTTGTV TRUE
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
      |      |» (N/A)                                TRUE  P
  435 |  447 |
  436 |  448 |
  437 |  449 |====> All 4 Comparisons Passed <====
  438 |  450 |
  439 |  451 |
  440 |  452 |TESTID: 5
  441 |  453 |
  442 |  454 |Test Name:   VGSELALT_005
  443 |  455 |Altitude Target
  444 |  456 |SRD Reference: 10.4.2.1
  445 |  457 |
  446 |  458 |
  447 |  459 |INPUT
      |      |»                           VALUE
  448 |  460 |-------------------------------------------------------------------------------
      |      |» -------------  --------------------------
  449 |  461 |Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
      |      |»                                    FALSE
  450 |  462 |FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
      |      |»                                   MASTER
  451 |  463 |VG_HS_DPKG.DATA.FLTPHASE
      |      |»                                 TAKEOFF
  452 |  464 |VG_INPUTS_INT_DPKG.ACALT.ALT
      |      |»                                 21000.0
  453 |  465 |VG_INPUTS_INT_DPKG.CRZALT
      |      |»                                 25000.0
  454 |  466 |VG_INPUTS_INT_DPKG.CRZALTVAL
      |      |»                                    TRUE
  455 |  467 |VG_ONLY_INT_DPKG.VGREFALT
      |      |»                                 20000.0
  456 |  468 |VG_OUTPUTS_INT_DPKG.OPPROC
      |      |»                              CLBINTLEVEL
  457 |  469 |VG_OUTPUTS_INT_DPKG.VGALTTGT
      |      |»                                 20000.0
  458 |  470 |VG_OUTPUTS_INT_DPKG.VGALTTGTVL
      |      |»                                    TRUE
  459 |  471 |VG_ONLY_INT_DPKG.NXTCLBTGT
      |      |»                                 18000.0
  460 |  472 |VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE
      |      |»                                 18000.0
  461 |  473 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
      |      |»                                 21000.0
  462 |  474 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
      |      |»                                   FALSE
  463 |  475 |
  464 |  476 |
  465 |  477 |OUTPUT                                                          EXPECTED
      |      |»   TOLERANCE              ACTUAL            P/F
  466 |  478 |-----------------------------------------------  ------------------------------
      |      |» -------------  --------------------------  ----
  467 |  479 |VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE                          18000.0
      |      |»           0.0                1.80000E+04  P
  468 |  480 |VG_INPUTS_INT_DPKG.CRZALT                                              25000.0
      |      |»           0.0                2.50000E+04  P
  469 |  481 |VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                         20000.0
      |      |»           0.0                2.00000E+04  P
  470 |  482 |VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          25000.0
      |      |»           0.0                2.50000E+04  P
  471 |  483 |VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                            TRUE
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
      |      |» (N/A)                          TRUE  P
  472 |  484 |
  473 |  485 |
  474 |  486 |====> All 5 Comparisons Passed <====
  475 |  487 |
  476 |  488 |
  477 |  489 |TESTID: 6
  478 |  490 |
  479 |  491 |Test Name:   VGSELALT_006
  480 |  492 |Next Altitude Target
  481 |  493 |SRD Reference: 10.4.2.2
  482 |  494 |
  483 |  495 |
  484 |  496 |INPUT
      |      |»                            VALUE
  485 |  497 |-------------------------------------------------------------------------------
      |      |» -------------  --------------------------
  486 |  498 |Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
      |      |»                                    FALSE
  487 |  499 |FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
      |      |»                                   MASTER
  488 |  500 |VG_HS_DPKG.DATA.FLTPHASE
      |      |»                                   CRUISE
  489 |  501 |VG_INPUTS_INT_DPKG.ACALT.ALT
      |      |»                                  21000.0
  490 |  502 |VG_INPUTS_INT_DPKG.CRZALT
      |      |»                                  25000.0
  491 |  503 |VG_INPUTS_INT_DPKG.CRZALTVAL
      |      |»                                    TRUE
  492 |  504 |VG_ONLY_INT_DPKG.NXTCLBTGT
      |      |»                                  18000.0
  493 |  505 |VG_ONLY_INT_DPKG.VGREFALT
      |      |»                                  20000.0
  494 |  506 |VG_OUTPUTS_INT_DPKG.OPPROC
      |      |»                               CLBINTLEVEL
  495 |  507 |VG_OUTPUTS_INT_DPKG.VGALTTGT
      |      |»                                  22000.0
  496 |  508 |VG_OUTPUTS_INT_DPKG.VGALTTGTVL
      |      |»                                   FALSE
  497 |  509 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
      |      |»                                  21000.0
  498 |  510 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
      |      |»                                   FALSE
  499 |  511 |
  500 |  512 |
  501 |  513 |OUTPUT                                                          EXPECTED
      |      |»   TOLERANCE              ACTUAL            P/F
  502 |  514 |-------------------------------------------------  ------------------------------
      |      |» -------------  --------------------------  ----
  503 |  515 |VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          25000.0
      |      |»           0.0                2.50000E+04  P
  504 |  516 |VG_INPUTS_INT_DPKG.CRZALT                                              25000.0
      |      |»           0.0                2.50000E+04  P
  505 |  517 |VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                           TRUE
      |      |»         (N/A)                          TRUE  P
  506 |  518 |VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                          FALSE
      |      |»         (N/A)                         FALSE  P
  507 |  519 |
  508 |  520 |
  509 |  521 |====> All 4 Comparisons Passed <====
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
510 | 522 |
511 | 523 |
512 | 524 | TESTID: 7
513 | 525 |
514 | 526 | Test Name:   VGSELALT_007
515 | 527 | Next Altitude Target
516 | 528 | SRD Reference:  10.4.2.2
517 | 529 |
518 | 530 |
519 | 531 | INPUT
    |     » VALUE
520 | 532 | ------------------------------------------------------------------------------
    |     » -------------  -------------------------
521 | 533 | Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
    |     »                                    FALSE
522 | 534 | FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
    |     »                                   MASTER
523 | 535 | VG_HS_DPKG.DATA.FLTPHASE
    |     »                                    CLIMB
524 | 536 | VG_INPUTS_INT_DPKG.ACALT.ALT
    |     »                                  21000.0
525 | 537 | VG_INPUTS_INT_DPKG.CRZALT
    |     »                                  25000.0
526 | 538 | VG_ONLY_INT_DPKG.NXTCLBTGT
    |     »                                  19000.0
527 | 539 | VG_ONLY_INT_DPKG.VGREFALT
    |     »                                  20000.0
528 | 540 | VG_OUTPUTS_INT_DPKG.OPPROC
    |     »                             AIRMASSASCNT
529 | 541 | VG_OUTPUTS_INT_DPKG.VGALTTGTVL
    |     »                                    FALSE
530 | 542 | VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
    |     »                                  22000.0
531 | 543 | VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
    |     »                                     TRUE
532 | 544 |
533 | 545 |
534 | 546 | OUTPUT                                                          EXPECTED
    |     »   TOLERANCE              ACTUAL            P/F
535 | 547 | ------------------------------------------------  ------------------------------
    |     » -------------  -------------------------  ----
536 | 548 | VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          19000.0
    |     »           0.0                1.90000E+04  P
537 | 549 | VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                            TRUE
    |     »         (N/A)                       TRUE  P
538 | 550 | VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                           FALSE
    |     »         (N/A)                      FALSE  P
539 | 551 |
540 | 552 |
541 | 553 | ====> All 3 Comparisons Passed <====
542 | 554 |
543 | 555 |
544 | 556 | TESTID: 8
545 | 557 |
546 | 558 | Test Name:   VGSELALT_008
547 | 559 | Next Altitude Target
548 | 560 | SRD Reference:  10.4.2.2
549 | 561 |
550 | 562 |
551 | 563 | INPUT
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
                                VALUE
-------------------------------------------------------------------------------------------
 -------------  --------------------------
Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
                                  FALSE
FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
                                 MASTER
VG_HS_DPKG.DATA.FLTPHASE
                                TAKEOFF
VG_INPUTS_INT_DPKG.ACALT.ALT
                                21000.0
VG_INPUTS_INT_DPKG.CRZALT
                                25000.0
VG_INPUTS_INT_DPKG.CRZALTVAL
                                  FALSE
VG_ONLY_INT_DPKG.NXTCLBTGT
                                20000.0
VG_ONLY_INT_DPKG.VGREFALT
                                20000.0
VG_OUTPUTS_INT_DPKG.OPPROC
                             CLBINTLEVEL
VG_OUTPUTS_INT_DPKG.VGALTTGTVL
                                   TRUE
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
                                21000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
                                  FALSE


OUTPUT                                                                  EXPECTED
   TOLERANCE              ACTUAL            P/F
-------------------------------------------------  ------------------------------
 -------------  --------------------------  ----
VG_OUTPUTS_INT_DPKG.NXTALTTGT                                                20000.0
           0.0                2.00000E+04  P
VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                                  TRUE
         (N/A)                      TRUE  P


====> All 2 Comparisons Passed <====


TESTID: 9

Test Name:   VGSELALT_009
Next Altitude Target
SRD Reference:  10.4.2.2


INPUT
                                VALUE
-------------------------------------------------------------------------------------------
 -------------  --------------------------
Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
                                  FALSE
FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
                                 MASTER
VG_HS_DPKG.DATA.FLTPHASE
                                 CRUISE
VG_INPUTS_INT_DPKG.ACALT.ALT
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
           » 21000.0
 589   601 VG_INPUTS_INT_DPKG.CRZALT
           » 25000.0
 590   602 VG_INPUTS_INT_DPKG.CRZALTVAL
           » TRUE
 591   603 VG_ONLY_INT_DPKG.NXTCLBTGT
           » 18000.0
 592   604 VG_ONLY_INT_DPKG.VGREFALT
           » 20000.0
 593   605 VG_OUTPUTS_INT_DPKG.OPPROC
           » CLBINTLEVEL
 594   606 VG_OUTPUTS_INT_DPKG.VGALTTGT
           » 22000.0
 595   607 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
           » TRUE
 596   608 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
           » 21000.0
 597   609 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
           » FALSE
 598   610
 599   611
 600   612 OUTPUT                                                              EXPECTED
           »   TOLERANCE              ACTUAL            P/F
 601   613 ----------------------------------------------------  -----------------------------
           » -------------  --------------------------  ----
 602   614 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                                 25000.0
           »         0.0          2.50000E+04  P
 603   615 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                                 TRUE
           »        (N/A)                TRUE  P
 604   616
 605   617
 606   618 ====> All 2 Comparisons Passed <====
 607   619
 608   620
 609   621 TESTID: 10
 610   622
 611   623 Test Name:   VGSELALT_010
 612   624 Next altitude Target
 613   625 SRD Reference:  10.4.2.2
 614   626
 615   627
 616   628 INPUT
           »                    VALUE
 617   629 ------------------------------------------------------------------------------------
           » -------------  --------------------------
 618   630 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
           » FALSE
 619   631 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
           » MASTER
 620   632 VG_HS_DPKG.DATA.FLTPHASE
           » CRUISE
 621   633 VG_INPUTS_INT_DPKG.ACALT.ALT
           » 21000.0
 622   634 VG_INPUTS_INT_DPKG.CRZALT
           » 23000.0
 623   635 VG_INPUTS_INT_DPKG.CRZALTVAL
           » TRUE
 624   636 VG_ONLY_INT_DPKG.NXTCLBTGT
           » 18000.0
 625   637 VG_ONLY_INT_DPKG.VGREFALT
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
»                                   20000.0
VG_OUTPUTS_INT_DPKG.OPPROC
»                               CLBINTLEVEL
VG_OUTPUTS_INT_DPKG.VGALTTGT
»                                   22000.0
VG_OUTPUTS_INT_DPKG.VGALTTGTVL
»                                      TRUE
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
»                                   21000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
»                                     FALSE


OUTPUT                                                               EXPECTED
»   TOLERANCE              ACTUAL            P/F
----------------------------------------------------  -----------------------------
» -------------  --------------------------  ----
VG_OUTPUTS_INT_DPKG.NXTALTTGT                                                   23000.0
»          0.0               2.30000E+04  P
VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                                     TRUE
»         (N/A)                     TRUE  P


====> All 2 Comparisons Passed <====


TESTID: 11

Test Name:   VGSELALT_011
Next altitude Target
SRD Reference:  10.4.2.2


INPUT
»                            VALUE
-------------------------------------------------------------------------------------
» -------------  --------------------------
Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
»                                     FALSE
FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
»                                    MASTER
VG_HS_DPKG.DATA.FLTPHASE
»                                    CRUISE
VG_INPUTS_INT_DPKG.ACALT.ALT
»                                   21000.0
VG_INPUTS_INT_DPKG.CRZALT
»                                   27000.0
VG_ONLY_INT_DPKG.NXTCLBTGT
»                                   15000.0
VG_ONLY_INT_DPKG.VGREFALT
»                                   20000.0
VG_OUTPUTS_INT_DPKG.OPPROC
»                              AIRMASSASCNT
VG_OUTPUTS_INT_DPKG.VGALTTGT
»                                   25500.0
VG_OUTPUTS_INT_DPKG.VGALTTGTVL
»                                      TRUE
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
»                                   21000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
»                                    FALSE


OUTPUT                                                                  EXPECTED
»   TOLERANCE             ACTUAL           P/F
----------------------------------------------------  -----------------------------
» -------------  -------------------------  ----
VG_OUTPUTS_INT_DPKG.NXTALTTGT                                                    27000.0
»          0.0               2.70000E+04  P
VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                                      TRUE
»         (N/A)                     TRUE  P


====> All 2 Comparisons Passed <====


TESTID: 12

Test Name:   VGSELALT_012
Next altitude Target
SRD Reference:  10.4.2.2


INPUT
»                           VALUE
-------------------------------------------------------------------------------------
» -------------  -------------------------
Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
»                                    FALSE
FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
»                                   MASTER
VG_HS_DPKG.DATA.FLTPHASE
»                                   CRUISE
VG_INPUTS_INT_DPKG.ACALT.ALT
»                                  21000.0
VG_INPUTS_INT_DPKG.CRZALT
»                                  26000.0
VG_INPUTS_INT_DPKG.FCCSELALT
»                                  26000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
»                                  21000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
»                                    FALSE
VG_ONLY_INT_DPKG.NXTDESTGT
»                                  15000.0
VG_ONLY_INT_DPKG.VGREFALT
»                                  26000.0
VG_OUTPUTS_INT_DPKG.OPPROC
»                                 CRZLEVEL
VG_OUTPUTS_INT_DPKG.VGALTTGTVL
»                                     TRUE


OUTPUT                                                                  EXPECTED
»   TOLERANCE             ACTUAL           P/F
----------------------------------------------------  -----------------------------
» -------------  -------------------------  ----
VG_OUTPUTS_INT_DPKG.NXTALTTGT                                                    26000.0
»          0.0               2.60000E+04  P
VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                                      TRUE
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
      |      |»         (N/A)                          TRUE  P
  701 |  713 |
  702 |  714 |
  703 |  715 |====> All 2 Comparisons Passed <====
  704 |  716 |
  705 |  717 |
  706 |  718 |TESTID: 13
  707 |  719 |
  708 |  720 |Test Name:   VGSELALT_013
  709 |  721 |Next altitude Target
  710 |  722 |SRD Reference:  10.4.2.2
  711 |  723 |
  712 |  724 |
  713 |  725 |INPUT
      |      |»                            VALUE
  714 |  726 |-------------------------------------------------------------------------------
      |      |» -------------  --------------------------
  715 |  727 |Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
      |      |»                                    FALSE
  716 |  728 |FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
      |      |»                                   MASTER
  717 |  729 |VG_HS_DPKG.DATA.FLTPHASE
      |      |»                                   CRUISE
  718 |  730 |VG_INPUTS_INT_DPKG.ACALT.ALT
      |      |»                                  17000.0
  719 |  731 |VG_INPUTS_INT_DPKG.CRZALT
      |      |»                                  26000.0
  720 |  732 |VG_INPUTS_INT_DPKG.CRZALTVAL
      |      |»                                    TRUE
  721 |  733 |VG_INPUTS_INT_DPKG.FCCSELALT
      |      |»                                  14000.0
  722 |  734 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
      |      |»                                  16000.0
  723 |  735 |VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
      |      |»                                    TRUE
  724 |  736 |VG_ONLY_INT_DPKG.NXTDESTGT
      |      |»                                  15000.0
  725 |  737 |VG_ONLY_INT_DPKG.VGREFALT
      |      |»                                  26000.0
  726 |  738 |VG_OUTPUTS_INT_DPKG.OPPROC
      |      |»                                 CRZLEVEL
  727 |  739 |VG_OUTPUTS_INT_DPKG.VGALTTGTVL
      |      |»                                    TRUE
  728 |  740 |
  729 |  741 |
  730 |  742 |OUTPUT                                                          EXPECTED
      |      |»   TOLERANCE              ACTUAL            P/F
  731 |  743 |-------------------------------------------------  ------------------------------
      |      |» -------------  --------------------------  ----
  732 |  744 |VG_OUTPUTS_INT_DPKG.NXTALTTGT                                        16000.0
      |      |»           0.0                1.60000E+04  P
  733 |  745 |VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                         TRUE
      |      |»         (N/A)                          TRUE  P
  734 |  746 |
  735 |  747 |
  736 |  748 |====> All 2 Comparisons Passed <====
  737 |  749 |
  738 |  750 |
  739 |  751 |TESTID: 14
  740 |  752 |
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
741 753 Test Name:   VGSELALT_014
742 754 Next altitude Target
743 755 SRD Reference:  10.4.2.2
744 756
745 757
746 758 INPUT
        »                            VALUE
747 759 ------------------------------------------------------------------------------------
        » -------------  --------------------------
748 760 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
        »                                    TRUE
749 761 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
        »                                  MASTER
750 762 VG_HS_DPKG.DATA.FLTPHASE
        »                                  CRUISE
751 763 VG_INPUTS_INT_DPKG.ACALT.ALT
        »                                 21000.0
752 764 VG_INPUTS_INT_DPKG.CRZALT
        »                                 26000.0
753 765 VG_INPUTS_INT_DPKG.CRZALTVAL
        »                                    TRUE
754 766 VG_INPUTS_INT_DPKG.FCCSELALT
        »                                 14000.0
755 767 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
        »                                 21000.0
756 768 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
        »                                    TRUE
757 769 VG_ONLY_INT_DPKG.NXTDESTGT
        »                                -1000.0
758 770 VG_ONLY_INT_DPKG.STEPCLBAHD
        »                                    TRUE
759 771 VG_ONLY_INT_DPKG.VGREFALT
        »                                 25000.0
760 772 VG_OUTPUTS_INT_DPKG.OPPROC
        »                               CRZLEVEL
761 773 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
        »                                  FALSE
762 774
763 775
764 776 OUTPUT                                                              EXPECTED
        »   TOLERANCE              ACTUAL            P/F
765 777 ------------------------------------------------  ------------------------------
        » -------------  --------------------------  ----
766 778 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                            26000.0
        »           0.0                 2.60000E+04  P
767 779 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                             TRUE
        »         (N/A)                       TRUE  P
768 780 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                            TRUE
        »         (N/A)                       TRUE  P
769 781
770 782
771 783 ====> All 3 Comparisons Passed <====
772 784
773 785
774 786 TESTID: 15
775 787
776 788 Test Name:   VGSELALT_015
777     ~~Next altitude Target~~
778     ~~SRD Reference:  10.4.2.2~~
    789 Next altitude Target  (10.4.2.2)
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
                790
                791 During Descent and Approach, maintaining Des/Appr Path, the Altitude Target shall be
                792 the maximum of the Vertical Guidance Reference Altitude (10.1.6) and the Descent
                793 Target Altitude (10.1.6.1.4), when the Vertical Guidance Operational Procedure (10.2)
                    »  is Descent Path.
                794
                795 this case to verify when the Vertical Guidance Operational Procedure is Descent Path,
                796 the Vertical Guidance Reference Altitude less than the Descent Target Altitude ,
                797 then he Altitude Target Is equal to the Descent Target Altitude
                798 SRD Reference:  VGUIDE_SRD_7006
                799
                800 SRD Reference:  10.4.2.2, VGUIDE_SRD_7006
779             801
780             802
781             803 INPUT
                    »                              VALUE
782             804 ------------------------------------------------------------------------------------
                    » -------------  --------------------------
783             805 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
                    »                                    FALSE
784             806 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
                    »                                   MASTER
785             807 VG_HS_DPKG.DATA.FLTPHASE
                    »                                  DESCENT
786             808 VG_INPUTS_INT_DPKG.ACALT.ALT
                    »                                  20000.0
787             809 VG_INPUTS_INT_DPKG.FCCSELALT
                    »                                  14000.0
788             810 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
                    »                                  21000.0
789             811 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
                    »                                    FALSE
790             812 VG_ONLY_INT_DPKG.DESTGTALT
                    »                                  20000.0
791             813 VG_ONLY_INT_DPKG.NXTDESTGT
                    »                                  25000.0
792             814 VG_ONLY_INT_DPKG.VGREFALT
                    »                                  25000.0
793             815 VG_OUTPUTS_INT_DPKG.OPPROC
                    »                               DESCENTPATH
794             816 VG_OUTPUTS_INT_DPKG.VGALTTGT
                    »                                  19500.0
795             817 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
                    »                                    TRUE
796             818
797             819
798             820 OUTPUT                                                          EXPECTED
                    »   TOLERANCE              ACTUAL             P/F
799             821 ------------------------------------------------  ------------------------------
                    » -------------  --------------------------  ----
800             822 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                          20000.0
                    »           0.0                 2.00000E+04  P
801             823 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                           25000.0
                    »           0.0                 2.50000E+04  P
802             824 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                             TRUE
                    »         (N/A)                       TRUE  P
803             825
804             826
805             827 ====> All 3 Comparisons Passed <====
806             828
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
807 | 829 |
808 | 830 | TESTID: 16
809 | 831 |
810 | 832 | Test Name:   VGSELALT_016
811 | 833 | Next altitude Target
812 | 834 | SRD Reference:  10.4.2.2
813 | 835 |
814 | 836 |
815 | 837 | INPUT
    |     » VALUE
816 | 838 | ------------------------------------------------------------------------------
    |     » -------------  --------------------------
817 | 839 | Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
    |     » TRUE
818 | 840 | FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
    |     » MASTER
819 | 841 | VG_HS_DPKG.DATA.FLTPHASE
    |     » DESCENT
820 | 842 | VG_INPUTS_INT_DPKG.ACALT.ALT
    |     » 16000.0
821 | 843 | VG_INPUTS_INT_DPKG.FCCENGDMODE
    |     » ALT_HOLD_SPEED
822 | 844 | VG_INPUTS_INT_DPKG.FCCSELALT
    |     » 14000.0
823 | 845 | VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
    |     » 15566.0
824 | 846 | VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
    |     » TRUE
825 | 847 | VG_ONLY_INT_DPKG.DESTGTALT
    |     » 16000.0
826 | 848 | VG_ONLY_INT_DPKG.NXTDESTGT
    |     » 14050.0
827 | 849 | VG_ONLY_INT_DPKG.VGREFALT
    |     » 15566.0
828 | 850 | VG_OUTPUTS_INT_DPKG.OPPROC
    |     » DESINTLEVEL
829 | 851 | VG_OUTPUTS_INT_DPKG.VGALTTGT
    |     » 14500.0
830 | 852 | VG_OUTPUTS_INT_DPKG.VGALTTGTVL
    |     » TRUE
831 | 853 |
832 | 854 |
833 | 855 | OUTPUT                                                    EXPECTED
    |     »   TOLERANCE              ACTUAL            P/F
834 | 856 | ----------------------------------------------------  ------------------------------
    |     » -------------  --------------------------  ----
835 | 857 | VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                          14500.0
    |     »           0.0                1.45000E+04  P
836 | 858 | VG_OUTPUTS_INT_DPKG.NXTALTTGT                                           15566.0
    |     »           0.0                1.55660E+04  P
837 | 859 | VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                             TRUE
    |     »         (N/A)                       TRUE  P
838 | 860 | VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                            FALSE
    |     »         (N/A)                      FALSE  P
839 | 861 |
840 | 862 |
841 | 863 | ====> All 4 Comparisons Passed <====
842 | 864 |
843 | 865 |
844 | 866 | TESTID: 17
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
845 867
846 868 Test Name:   VGSELALT_017
847 869 Next altitude Target
848 870 SRD Reference:  10.4.2.2
849 871
850 872
851 873 INPUT
        »                            VALUE
852 874 ------------------------------------------------------------------------------------
        » -------------  --------------------------
853 875 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
        »                                    TRUE
854 876 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
        »                                  MASTER
855 877 VG_HS_DPKG.DATA.FLTPHASE
        »                                DESCENT
856 878 VG_INPUTS_INT_DPKG.ACALT.ALT
        »                                21000.0
857 879 VG_INPUTS_INT_DPKG.FCCSELALT
        »                                14000.0
858 880 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
        »                                21000.0
859 881 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
        »                                 FALSE
860 882 VG_ONLY_INT_DPKG.DESTGTALT
        »                                22000.0
861 883 VG_ONLY_INT_DPKG.NXTDESTGT
        »                                15500.0
862 884 VG_ONLY_INT_DPKG.VGREFALT
        »                                21500.0
863 885 VG_OUTPUTS_INT_DPKG.OPPROC
        »                             DESPATHOVER
864 886 VG_OUTPUTS_INT_DPKG.VGALTTGT
        »                                15555.0
865 887 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
        »                                   TRUE
866 888
867 889
868 890 OUTPUT                                                          EXPECTED
        »   TOLERANCE              ACTUAL            P/F
869 891 ------------------------------------------------  ------------------------------
        » -------------  --------------------------  ----
870 892 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                          15555.0
        »           0.0                1.55550E+04  P
871 893 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                           15500.0
        »           0.0                1.55000E+04  P
872 894 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                             TRUE
        »         (N/A)                       TRUE  P
873 895
874 896
875 897 ====> All 3 Comparisons Passed <====
876 898
877 899
878 900 TESTID: 18
879 901
880 902 Test Name:   VGSELALT_018
881 903 Next altitude Target
882 904 SRD Reference:  10.4.2.2
883 905
884 906
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
885  907 INPUT
         »                           VALUE
886  908 ------------------------------------------------------------------------------
         » -------------  --------------------------
887  909 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
         »                                    FALSE
888  910 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
         »                                   MASTER
889  911 VG_HS_DPKG.DATA.FLTPHASE
         »                                 DESCENT
890  912 VG_INPUTS_INT_DPKG.ACALT.ALT
         »                                 21000.0
891  913 VG_INPUTS_INT_DPKG.FCCSELALT
         »                                 14000.0
892  914 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
         »                                 21000.0
893  915 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
         »                                    FALSE
894  916 VG_ONLY_INT_DPKG.DESTGTALT
         »                                 14500.0
895  917 VG_ONLY_INT_DPKG.NXTDESTGT
         »                                 14050.0
896  918 VG_ONLY_INT_DPKG.VGREFALT
         »                                 22000.0
897  919 VG_OUTPUTS_INT_DPKG.OPPROC
         »                               LATEDESCENT
898  920 VG_OUTPUTS_INT_DPKG.VGALTTGT
         »                                 15555.0
899  921 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
         »                                    TRUE
900  922
901  923
902  924 OUTPUT                                                          EXPECTED
         »   TOLERANCE              ACTUAL            P/F
903  925 ------------------------------------------------  ------------------------------
         » -------------  --------------------------  ----
904  926 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                        15555.0
         »           0.0                1.55550E+04  P
905  927 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                         14500.0
         »           0.0                1.45000E+04  P
906  928 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                           TRUE
         »         (N/A)                       TRUE  P
907  929
908  930
909  931 ====> All 3 Comparisons Passed <====
910  932
911  933
912  934 TESTID: 19
913  935
914  936 Test Name:   VGSELALT_019
915  937 Next altitude Target
916  938 SRD Reference:  10.4.2.2
917  939
918  940
919  941 INPUT
         »                           VALUE
920  942 ------------------------------------------------------------------------------
         » -------------  --------------------------
921  943 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
         »                                    FALSE
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
922 944 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
    »                                    MASTER
923 945 VG_HS_DPKG.DATA.FLTPHASE
    »                                  DESCENT
924 946 VG_INPUTS_INT_DPKG.ACALT.ALT
    »                                  21000.0
925 947 VG_INPUTS_INT_DPKG.FCCSELALT
    »                                  14000.0
926 948 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
    »                                  21000.0
927 949 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
    »                                    FALSE
928 950 VG_ONLY_INT_DPKG.DESTGTALT
    »                                  15000.0
929 951 VG_ONLY_INT_DPKG.NXTDESTGT
    »                                  14050.0
930 952 VG_ONLY_INT_DPKG.VGREFALT
    »                                  21000.0
931 953 VG_OUTPUTS_INT_DPKG.OPPROC
    »                               EARLYDESCENT
932 954 VG_OUTPUTS_INT_DPKG.VGALTTGT
    »                                  15555.0
933 955 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
    »                                    TRUE
934 956
935 957
936 958 OUTPUT                                                          EXPECTED
    »   TOLERANCE              ACTUAL            P/F
937 959 ------------------------------------------------  ------------------------------
    » -------------  -------------------------  ----
938 960 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                          15555.0
    »           0.0                1.55550E+04  P
939 961 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          15000.0
    »           0.0                1.50000E+04  P
940 962 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                            TRUE
    »         (N/A)                      TRUE  P
941 963
942 964
943 965 ====> All 3 Comparisons Passed <====
944 966
945 967
946 968 TESTID: 20
947 969
948 970 Test Name:   VGSELALT_020
949 971 Next altitude Target
950 972 SRD Reference:  10.4.2.2
951 973
952 974
953 975 INPUT
    »                           VALUE
954 976 ------------------------------------------------------------------------------------
    » -------------  -------------------------
955 977 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
    »                                    FALSE
956 978 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
    »                                    MASTER
957 979 VG_HS_DPKG.DATA.FLTPHASE
    »                                  DESCENT
958 980 VG_INPUTS_INT_DPKG.ACALT.ALT
    »                                  21000.0
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
959   981 VG_INPUTS_INT_DPKG.FCCSELALT
          »                                  14000.0
960   982 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
          »                                  18000.0
961   983 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
          »                                    TRUE
962   984 VG_OUTPUTS_INT_DPKG.ALTTAPETGT
          »                                  15555.0
963   985 VG_ONLY_INT_DPKG.DESTGTALT
          »                                  17500.0
964   986 VG_ONLY_INT_DPKG.NXTDESTGT
          »                                  14050.0
965   987 VG_ONLY_INT_DPKG.VGREFALT
          »                                  20000.0
966   988 VG_OUTPUTS_INT_DPKG.OPPROC
          »                              HOLDTOMANUAL
967   989 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
          »                                    TRUE
968   990
969   991
970   992 OUTPUT                                                          EXPECTED
          »   TOLERANCE              ACTUAL            P/F
971   993 ------------------------------------------------  ------------------------------
          » -------------  -------------------------  ----
972   994 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                        15555.0
          »           0.0                1.55550E+04  P
973   995 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                         18000.0
          »           0.0                1.80000E+04  P
974   996 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                           TRUE
          »         (N/A)                      TRUE  P
975   997
976   998
977   999 ====> All 3 Comparisons Passed <====
978  1000
979  1001
980  1002 TESTID: 21
981  1003
982  1004 Test Name:   VGSELALT_021
983  1005 Next altitude Target
984  1006 SRD Reference:  10.4.2.2
985  1007
986  1008
987  1009 INPUT
          »                          VALUE
988  1010 ------------------------------------------------------------------------------------
          » -------------  -------------------------
989  1011 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
          »                                   FALSE
990  1012 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
          »                                  MASTER
991  1013 VG_HS_DPKG.DATA.FLTPHASE
          »                                 DESCENT
992  1014 VG_INPUTS_INT_DPKG.ACALT.ALT
          »                                  19000.0
993  1015 VG_INPUTS_INT_DPKG.FCCSELALT
          »                                  14000.0
994  1016 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
          »                                  19000.0
995  1017 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
          »                                   FALSE
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
 996  1018 VG_ONLY_INT_DPKG.DESTGTALT
           »                                  17000.0
 997  1019 VG_ONLY_INT_DPKG.NXTDESTGT
           »                                  15500.0
 998  1020 VG_ONLY_INT_DPKG.VGREFALT
           »                                  16000.0
 999  1021 VG_OUTPUTS_INT_DPKG.OPPROC
           »                               AIRMASSDSCNT
1000  1022 VG_OUTPUTS_INT_DPKG.VGALTTGT
           »                                  15555.0
1001  1023 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
           »                                     TRUE
1002  1024
1003  1025
1004  1026 OUTPUT                                                          EXPECTED
           »   TOLERANCE              ACTUAL            P/F
1005  1027 ------------------------------------------------  ------------------------------
           » -------------  -------------------------  ----
1006  1028 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                        15555.0
           »           0.0                1.55550E+04  P
1007  1029 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                         15500.0
           »           0.0                1.55000E+04  P
1008  1030 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                           TRUE
           »         (N/A)                      TRUE  P
1009  1031
1010  1032
1011  1033 ====> All 3 Comparisons Passed <====
1012  1034
1013  1035
1014  1036 TESTID: 22
1015  1037
1016  1038 Test Name:   VGSELALT_022
1017  1039 SRD Reference:  10.2.13.3, 10.4.2, 10.4.2.1
1018  1040
1019  1041
1020  1042 INPUT
           »                           VALUE
1021  1043 ------------------------------------------------------------------------------------
           » -------------  -------------------------
1022  1044 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
           »                                 FALSE
1023  1045 VG_INPUTS_INT_DPKG.ACALT.ALT
           »                                  18000.0
1024  1046 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
           »                                  18000.0
1025  1047 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
           »                                 FALSE
1026  1048 VG_ONLY_INT_DPKG.DESTGTALT
           »                                  17000.0
1027  1049 VG_ONLY_INT_DPKG.NXTDESTGT
           »                                  15550.0
1028  1050 VG_ONLY_INT_DPKG.VGREFALT
           »                                  16000.0
1029  1051 VG_OUTPUTS_INT_DPKG.OPPROC
           »                               EODRIFTDOWN
1030  1052 VG_OUTPUTS_INT_DPKG.VGALTTGT
           »                                  14444.0
1031  1053 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
           »                                     TRUE
1032  1054
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
1033 | 1055 |
1034 | 1056 | OUTPUT                                                                EXPECTED
     |      | »   TOLERANCE              ACTUAL            P/F
1035 | 1057 | ------------------------------------------------  ------------------------------
     |      | » -------------  -------------------------  ----
1036 | 1058 | VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                          14444.0
     |      | »           0.0                1.44440E+04  P
1037 | 1059 | VG_OUTPUTS_INT_DPKG.NXTALTTGT                                           15550.0
     |      | »           0.0                1.55500E+04  P
1038 | 1060 | VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                             TRUE
     |      | »         (N/A)                       TRUE  P
1039 | 1061 |
1040 | 1062 |
1041 | 1063 | ====> All 3 Comparisons Passed <====
1042 | 1064 |
1043 | 1065 |
1044 | 1066 | TESTID: 23
1045 | 1067 | Test Name:   VGSELALT_023
1046 | 1068 | Next altitude Target
1047 | 1069 | SRD Reference:  10.4.2.2
1048 | 1070 |
1049 | 1071 |
1050 | 1072 | INPUT
     |      | »                           VALUE
1051 | 1073 | ------------------------------------------------------------------------------------
     |      | » -------------  -------------------------
1052 | 1074 | Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
     |      | »                                  FALSE
1053 | 1075 | FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
     |      | »                                 MASTER
1054 | 1076 | VG_HS_DPKG.DATA.FLTPHASE
     |      | »                                 CRUISE
1055 | 1077 | VG_INPUTS_INT_DPKG.ACALT.ALT
     |      | »                                21000.0
1056 | 1078 | VG_INPUTS_INT_DPKG.CRZALT
     |      | »                                13000.0
1057 | 1079 | VG_INPUTS_INT_DPKG.FCCSELALT
     |      | »                                14000.0
1058 | 1080 | VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
     |      | »                                21000.0
1059 | 1081 | VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
     |      | »                                  FALSE
1060 | 1082 | VG_ONLY_INT_DPKG.NXTDESTGT
     |      | »                                -1000.0
1061 | 1083 | VG_ONLY_INT_DPKG.STEPCLBAHD
     |      | »                                  FALSE
1062 | 1084 | VG_ONLY_INT_DPKG.VGREFALT
     |      | »                                25000.0
1063 | 1085 | VG_OUTPUTS_INT_DPKG.OPPROC
     |      | »                               CRZLEVEL
1064 | 1086 | VG_OUTPUTS_INT_DPKG.VGALTTGTVL
     |      | »                                  TRUE
1065 | 1087 |
1066 | 1088 |
1067 | 1089 | OUTPUT                                                                EXPECTED
     |      | »   TOLERANCE              ACTUAL            P/F
1068 | 1090 | ------------------------------------------------  ------------------------------
     |      | » -------------  -------------------------  ----
1069 | 1091 | VG_OUTPUTS_INT_DPKG.NXTALTTGT                                           13000.0
     |      | »           0.0                1.30000E+04  P
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
1070 | 1092 | VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                                    TRUE
     |      | »         (N/A)                          TRUE  P
1071 | 1093 |
1072 | 1094 |
1073 | 1095 | ====> All 2 Comparisons Passed <====
1074 | 1096 |
1075 | 1097 |
1076 |      | ~~TESTID: 23~~
     | 1098 | TESTID: 24
1077 | 1099 |
1078 | 1100 | Test Name:   VGSELALT_023
1079 | 1101 | Next altitude Target
1080 | 1102 | SRD Reference:  10.4.2.2
1081 | 1103 |
1082 | 1104 |
1083 | 1105 | INPUT
     |      | »                            VALUE
1084 | 1106 | ------------------------------------------------------------------------------------
     |      | » -------------  --------------------------
1085 | 1107 | Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
     |      | »                                    FALSE
1086 | 1108 | FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
     |      | »                                   MASTER
1087 | 1109 | VG_HS_DPKG.DATA.FLTPHASE
     |      | »                                   CRUISE
1088 | 1110 | VG_INPUTS_INT_DPKG.ACALT.ALT
     |      | »                                  17000.0
1089 | 1111 | VG_INPUTS_INT_DPKG.CRZALT
     |      | »                                  13000.0
1090 | 1112 | VG_INPUTS_INT_DPKG.FCCSELALT
     |      | »                                  12000.0
1091 | 1113 | VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
     |      | »                                  17000.0
1092 | 1114 | VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
     |      | »                                    TRUE
1093 | 1115 | VG_ONLY_INT_DPKG.DESTGTALT
     |      | »                                  16000.0
1094 | 1116 | VG_ONLY_INT_DPKG.NXTDESTGT
     |      | »                                  -1001.0
1095 | 1117 | VG_ONLY_INT_DPKG.STEPCLBAHD
     |      | »                                   FALSE
1096 | 1118 | VG_ONLY_INT_DPKG.VGREFALT
     |      | »                                  25000.0
1097 | 1119 | VG_OUTPUTS_INT_DPKG.OPPROC
     |      | »                                 CRZLEVEL
1098 | 1120 | VG_OUTPUTS_INT_DPKG.VGALTTGTVL
     |      | »                                    TRUE
1099 | 1121 |
1100 | 1122 |
1101 | 1123 | OUTPUT                                                                EXPECTED
     |      | »   TOLERANCE              ACTUAL            P/F
1102 | 1124 | ---------------------------------------------------  ------------------------------
     |      | » -------------  --------------------------  ----
1103 | 1125 | VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          17000.0
     |      | »           0.0                1.70000E+04  P
1104 | 1126 | VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                            TRUE
     |      | »         (N/A)                          TRUE  P
1105 | 1127 |
1106 | 1128 |
1107 | 1129 | ====> All 2 Comparisons Passed <====
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
1108 1130
1109 1131
1110      ~~TESTID: 24~~
     1132 TESTID: 25
1111 1133
1112 1134 Test Name:   VGSELALT_024
1113 1135 Next altitude Target
1114 1136 SRD Reference:  10.4.2.2
1115 1137
1116 1138
1117 1139 INPUT
          »                            VALUE
1118 1140 ------------------------------------------------------------------------------
          » -------------  --------------------------
1119 1141 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
          »                                    FALSE
1120 1142 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
          »                                   MASTER
1121 1143 VG_HS_DPKG.DATA.FLTPHASE
          »                                    CLIMB
1122 1144 VG_INPUTS_INT_DPKG.ACALT.ALT
          »                                  20000.0
1123 1145 VG_INPUTS_INT_DPKG.CRZALT
          »                                  13000.0
1124 1146 VG_INPUTS_INT_DPKG.CRZALTVAL
          »                                    FALSE
1125 1147 VG_INPUTS_INT_DPKG.FCCSELALT
          »                                  14000.0
1126 1148 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
          »                                  20000.0
1127 1149 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
          »                                    FALSE
1128 1150 VG_ONLY_INT_DPKG.NXTCLBTGT
          »                                  42000.0
1129 1151 VG_ONLY_INT_DPKG.VGREFALT
          »                                  21000.0
1130 1152 VG_OUTPUTS_INT_DPKG.OPPROC
          »                                CLBINTLEVEL
1131 1153 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
          »                                     TRUE
1132 1154 VG_INPUTS_INT_DPKG.CRZALTVAL
          »                                     TRUE
1133 1155
1134 1156
1135 1157 OUTPUT                                                          EXPECTED
          »   TOLERANCE              ACTUAL            P/F
1136 1158 ------------------------------------------------  ------------------------------
          » -------------  --------------------------  ----
1137 1159 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          42000.0
          »           0.0                4.20000E+04  P
1138 1160 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                           TRUE
          »         (N/A)                        TRUE  P
1139 1161
1140 1162
1141 1163 ====> All 2 Comparisons Passed <====
1142 1164
1143 1165
1144      ~~TESTID: 25~~
     1166 TESTID: 26
1145 1167
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
1146  1168 Test Name:   VGSELALT_025
1147  1169 Next altitude Target
1148  1170 SRD Reference:  10.4.2.2
1149  1171
1150  1172
1151  1173 INPUT
           »                            VALUE
1152  1174 ------------------------------------------------------------------------------------
           » -------------  --------------------------
1153  1175 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
           »                                  FALSE
1154  1176 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
           »                                 MASTER
1155  1177 VG_HS_DPKG.DATA.FLTPHASE
           »                                 CRUISE
1156  1178 VG_INPUTS_INT_DPKG.ACALT.ALT
           »                                21000.0
1157  1179 VG_INPUTS_INT_DPKG.CRZALT
           »                                13000.0
1158  1180 VG_INPUTS_INT_DPKG.CRZALTVAL
           »                                   TRUE
1159  1181 VG_INPUTS_INT_DPKG.FCCSELALT
           »                                14000.0
1160  1182 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
           »                                21000.0
1161  1183 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
           »                                   FALSE
1162  1184 VG_ONLY_INT_DPKG.DESTGTALT
           »                                -1000.0
1163  1185 VG_ONLY_INT_DPKG.NXTCLBTGT
           »                                -1000.0
1164  1186 VG_ONLY_INT_DPKG.NXTDESTGT
           »                                -1000.0
1165  1187 VG_ONLY_INT_DPKG.STEPCLBAHD
           »                                   FALSE
1166  1188 VG_ONLY_INT_DPKG.VGREFALT
           »                                25000.0
1167  1189 VG_OUTPUTS_INT_DPKG.OPPROC
           »                           HOLDTOMANUAL
1168  1190 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
           »                                   TRUE
1169  1191 Vg_Inputs_Int_Dpkg.Minimum_Certified_Altitude
           »                                -1000.0
1170  1192
1171  1193
1172  1194 OUTPUT                                                          EXPECTED
           »   TOLERANCE              ACTUAL            P/F
1173  1195 ------------------------------------------------  ------------------------------
           » -------------  --------------------------  ----
1174  1196 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          -1000.0
           »           0.0               -1.00000E+03  P
1175  1197 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                           FALSE
           »         (N/A)                      FALSE  P
1176  1198
1177  1199
1178  1200 ====> All 2 Comparisons Passed <====
1179  1201
1180  1202
1181       ~~TESTID: 26~~
      1203 TESTID: 27
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
1182 1204
1183 1205 Test Name:   VGSELALT_026
1184 1206 Next altitude Target
1185 1207 SRD Reference:  10.4.2.2
1186 1208
1187 1209
1188 1210 INPUT
          »                            VALUE
1189 1211 ------------------------------------------------------------------------------------
          » -------------  --------------------------
1190 1212 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
          »                                 FALSE
1191 1213 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
          »                                MASTER
1192 1214 VG_HS_DPKG.DATA.FLTPHASE
          »                                 CRUISE
1193 1215 VG_INPUTS_INT_DPKG.ACALT.ALT
          »                               21000.0
1194 1216 VG_INPUTS_INT_DPKG.CRZALT
          »                               14500.0
1195 1217 VG_INPUTS_INT_DPKG.CRZALTVAL
          »                                  TRUE
1196 1218 VG_INPUTS_INT_DPKG.FCCSELALT
          »                               14000.0
1197 1219 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
          »                               21000.0
1198 1220 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
          »                                  FALSE
1199 1221 VG_ONLY_INT_DPKG.DESTGTALT
          »                               -1000.0
1200 1222 VG_ONLY_INT_DPKG.NXTCLBTGT
          »                               -1000.0
1201 1223 VG_ONLY_INT_DPKG.NXTDESTGT
          »                               -1000.0
1202 1224 VG_ONLY_INT_DPKG.STEPCLBAHD
          »                                  FALSE
1203 1225 VG_ONLY_INT_DPKG.VGREFALT
          »                               25000.0
1204 1226 VG_OUTPUTS_INT_DPKG.OPPROC
          »                              CRZLEVEL
1205 1227 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
          »                                  TRUE
1206 1228
1207 1229
1208 1230 OUTPUT                                                          EXPECTED
          »   TOLERANCE              ACTUAL            P/F
1209 1231 ------------------------------------------------  ------------------------------
          » -------------  --------------------------  ----
1210 1232 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          -1000.0
          »           0.0               -1.00000E+03  P
1211 1233 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                           FALSE
          »         (N/A)                      FALSE  P
1212 1234
1213 1235
1214 1236 ====> All 2 Comparisons Passed <====
1215 1237
1216 1238
1217      TESTID: 27
     1239 TESTID: 28
1218 1240
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
1219 1241 Test Name:   VGSELALT_027
1220 1242 Next altitude Target
1221 1243 SRD Reference:  10.4.2.2
1222 1244
1223 1245
1224 1246 INPUT
          »                            VALUE
1225 1247 ------------------------------------------------------------------------------------
          » -------------  --------------------------
1226 1248 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
          »                                    TRUE
1227 1249 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
          »                                  MASTER
1228 1250 VG_HS_DPKG.DATA.FLTPHASE
          »                                DESCENT
1229 1251 VG_INPUTS_INT_DPKG.ACALT.ALT
          »                                16000.0
1230 1252 VG_INPUTS_INT_DPKG.FCCENGDMODE
          »                       ALT_HOLD_MAX_THRUST
1231 1253 VG_INPUTS_INT_DPKG.FCCSELALT
          »                                14000.0
1232 1254 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
          »                                15566.0
1233 1255 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
          »                                  TRUE
1234 1256 VG_ONLY_INT_DPKG.DESTGTALT
          »                                16000.0
1235 1257 VG_ONLY_INT_DPKG.NXTDESTGT
          »                                14050.0
1236 1258 VG_ONLY_INT_DPKG.VGREFALT
          »                                15566.0
1237 1259 VG_OUTPUTS_INT_DPKG.OPPROC
          »                             DESINTLEVEL
1238 1260 VG_OUTPUTS_INT_DPKG.VGALTTGT
          »                                14500.0
1239 1261 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
          »                                  TRUE
1240 1262
1241 1263
1242 1264 OUTPUT                                                          EXPECTED
          »   TOLERANCE              ACTUAL            P/F
1243 1265 ------------------------------------------------  ------------------------------
          » -------------  --------------------------  ----
1244 1266 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                        14500.0
          »           0.0                1.45000E+04  P
1245 1267 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                         15566.0
          »           0.0                1.55660E+04  P
1246 1268 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                          TRUE
          »         (N/A)                      TRUE  P
1247 1269 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                        FALSE
          »         (N/A)                     FALSE  P
1248 1270
1249 1271
1250 1272 ====> All 4 Comparisons Passed <====
1251 1273
1252 1274
1253      TESTID: 28
     1275 TESTID: 29
1254 1276
1255 1277 Test Name:   VGSELALT_028
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
1256 1278 The Vertical Guidance Altitude Target (AA, CIL, CL, DP, DIL, ED, LD, DPO, HM, AD, EO
          » T/O, EO T/O Lvl Acc, EODD)
1257 1279 is the Vertical Guidance Reference Altitude (FCC package not called)
1258 1280 SRD REFERENCE 10.2.1.3, 10.2.2.3, 10.2.3.3, 10.2.4.3, 10.2.5.3, 10.2.6.3,
1259 1281 SRD REFERENCE 10.2.7.3, 10.2.8.3, 10.2.9.3, 10.2.10.3, 10.2.11.3, 10.2.12.3
1260 1282 (VGUIDE_SRD_8005, MD11_VG_TEST_1104) & (VGUIDE_SRD_5206, MD11_VG_TEST_1202) & (VGUIDE
          » _SRD_5304, MD11_VG_TEST_1303) &
1261 1283 (VGUIDE_SRD_5618, MD11_VG_TEST_1403) & (VGUIDE_SRD_5655, MD11_VG_TEST_1503) & (VGUIDE
          » _SRD_8286, MD11_VG_TEST_3822) &
1262 1284 (VGUIDE_SRD_8235, MD11_VG_TEST_3823) & (VGUIDE_SRD_8201, MD11_VG_TEST_3824) & (VGUIDE
          » _SRD_8152, MD11_VG_TEST_3825) &
1263 1285 (VGUIDE_SRD_8118, MD11_VG_TEST_3826) & (VGUIDE_SRD_2840, MD11_VG_TEST_3827) & (VGUIDE
          » _SRD_5555, MD11_VG_TEST_3828) &
1264 1286 (VGUIDE_SRD_2894, MD11_VG_TEST_3829)
1265 1287
1266 1288
1267 1289 INPUT
          »                            VALUE
1268 1290 ------------------------------------------------------------------------------------
          » -------------  --------------------------
1269 1291 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
          »                                  FALSE
1270 1292 VG_ONLY_INT_DPKG.VGREFALT
          »                                15566.0
1271 1293 VG_OUTPUTS_INT_DPKG.VGALTTGT
          »                                15000.0
1272 1294
1273 1295
1274 1296 OUTPUT                                                              EXPECTED
          »   TOLERANCE              ACTUAL            P/F
1275 1297 ------------------------------------------------  ------------------------------
          » -------------  --------------------------  ----
1276 1298 VG_ONLY_INT_DPKG.VGREFALT                                          15566.0
          »           0.0                1.55660E+04  P
1277 1299 VG_OUTPUTS_INT_DPKG.VGALTTGT                                       15000.0
          »           0.0                1.50000E+04  P
1278 1300
1279 1301
1280 1302 ====> All 2 Comparisons Passed <====
1281 1303
1282 1304
1283      ~~TESTID: 29~~
     1305 TESTID: 30
1284 1306
1285 1307 Test Name:   VGSELALT_029
1286 1308 The Vertical Guidance Altitude Target (AA, CIL, CL, EO T/O, EO T/O, Lvl Acc) is the V
          » ertical Guidance Reference Altitude
1287 1309 SRD REFERENCE 10.2.1.3, 10.2.2.3, 10.2.3.3, 10.2.11.3, 10.2.12.3 (FCC package called)
1288 1310 (VGUIDE_SRD_8005, MD11_VG_TEST_1104) & (VGUIDE_SRD_5206, MD11_VG_TEST_1202) & (VGUIDE
          » _SRD_5304, MD11_VG_TEST_1303) &
1289 1311 (VGUIDE_SRD_5618, MD11_VG_TEST_1403) & (VGUIDE_SRD_5655, MD11_VG_TEST_1503) & (VGUIDE
          » _SRD_8286, MD11_VG_TEST_3822) &
1290 1312 (VGUIDE_SRD_8235, MD11_VG_TEST_3823) & (VGUIDE_SRD_8201, MD11_VG_TEST_3824) & (VGUIDE
          » _SRD_8152, MD11_VG_TEST_3825) &
1291 1313 (VGUIDE_SRD_8118, MD11_VG_TEST_3826) & (VGUIDE_SRD_2840, MD11_VG_TEST_3827) & (VGUIDE
          » _SRD_5555, MD11_VG_TEST_3828) &
1292 1314 (VGUIDE_SRD_2894, MD11_VG_TEST_3829)
1293 1315
1294 1316
1295 1317 INPUT
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
                                VALUE
-------------------------------------------------------------------------------------------
 -------------  --------------------------
Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
                                    TRUE
VG_ONLY_INT_DPKG.VGREFALT
                                 15566.0
VG_OUTPUTS_INT_DPKG.VGALTTGT
                                 15000.0


OUTPUT                                                                  EXPECTED
   TOLERANCE              ACTUAL            P/F
-------------------------------------------------  ------------------------------
 -------------  --------------------------  ----
VG_ONLY_INT_DPKG.VGREFALT                                                15566.0
           0.0                1.55660E+04  P
VG_OUTPUTS_INT_DPKG.VGALTTGT                                             15566.0
           0.0                1.55660E+04  P


====> All 2 Comparisons Passed <====


~~TESTID: 30~~
TESTID: 31


Test Name:   VGSELALT_030
Next altitude Target
SRD Reference:  10.4.2.2


INPUT
                                VALUE
-------------------------------------------------------------------------------------------
 -------------  --------------------------
Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
                                    TRUE
FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
                                  MASTER
VG_HS_DPKG.DATA.FLTPHASE
                                  CRUISE
VG_INPUTS_INT_DPKG.ACALT.ALT
                                 21000.0
VG_INPUTS_INT_DPKG.CRZALT
                                 26000.0
VG_INPUTS_INT_DPKG.CRZALTVAL
                                    TRUE
VG_INPUTS_INT_DPKG.FCCSELALT
                                 14000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
                                 21000.0
VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
                                    TRUE
VG_ONLY_INT_DPKG.NXTDESTGT
                                 -1000.0
VG_ONLY_INT_DPKG.STEPCLBAHD
                                    TRUE
VG_ONLY_INT_DPKG.VGREFALT
                                 25000.0
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
1332 1354 VG_OUTPUTS_INT_DPKG.OPPROC
     »                                AIRMASSASCNT
1333 1355 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
     »                                     FALSE
1334 1356
1335 1357
1336 1358 OUTPUT                                                                EXPECTED
     »   TOLERANCE              ACTUAL            P/F
1337 1359 ------------------------------------------------  ------------------------------
     » -------------  --------------------------  ----
1338 1360 VG_OUTPUTS_INT_DPKG.NXTALTTGT                                          26000.0
     »           0.0                2.60000E+04  P
1339 1361 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                                           TRUE
     »          (N/A)                      TRUE  P
1340 1362 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                                           TRUE
     »          (N/A)                      TRUE  P
1341 1363
1342 1364
1343 1365 ====> All 3 Comparisons Passed <====
1344 1366
1345 1367
1346      ~~Test End Time: Oct 23 17:07:01 2012~~
     1368 TESTID: 32
     1369
     1370 During Descent and Approach, maintaining Des/Appr Path, the Altitude Target shall be
     1371 the maximum of the Vertical Guidance Reference Altitude (10.1.6) and the Descent
     1372 Target Altitude (10.1.6.1.4), when the Vertical Guidance Operational Procedure (10.2)
          »  is Descent Path.
     1373
     1374 this case to verify when the Vertical Guidance Operational Procedure is Descent Path,
     1375 the Vertical Guidance Reference Altitude greater than the Descent Target Altitude ,
     1376 then he Altitude Target Is equal to the Vertical Guidance Reference Altitude
     1377 SRD Reference:  VGUIDE_SRD_7006
     1378
     1379
     1380 INPUT
          »                            VALUE
     1381 ------------------------------------------------------------------------------------
          » -------------  --------------------------
     1382 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
          »                                   FALSE
     1383 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
          »                                  MASTER
     1384 VG_HS_DPKG.DATA.FLTPHASE
          »                                DESCENT
     1385 VG_INPUTS_INT_DPKG.ACALT.ALT
          »                                20000.0
     1386 VG_INPUTS_INT_DPKG.FCCSELALT
          »                                14000.0
     1387 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
          »                                21000.0
     1388 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
          »                                  FALSE
     1389 VG_ONLY_INT_DPKG.DESTGTALT
          »                                20000.0
     1390 VG_ONLY_INT_DPKG.NXTDESTGT
          »                                25000.0
     1391 VG_ONLY_INT_DPKG.VGREFALT
          »                                25000.0
     1392 VG_OUTPUTS_INT_DPKG.OPPROC
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
                                    DESCENTPATH
1393 VG_OUTPUTS_INT_DPKG.VGALTTGT
                                        20500.0
1394 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
                                          TRUE
1395
1396
1397 OUTPUT                                                                EXPECTED
     »   TOLERANCE              ACTUAL            P/F
1398 ------------------------------------------------  ------------------------------
     » -------------  --------------------------  ----
1399 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                          20500.0
     »           0.0                 2.05000E+04  P
1400
1401
1402 ====> All 1 Comparisons Passed <====
1403
1404
1405 TESTID: 33
1406
1407 During Descent and Approach, maintaining Des/Appr Path, the Altitude Target shall be
1408 the maximum of the Vertical Guidance Reference Altitude (10.1.6) and the Descent
1409 Target Altitude (10.1.6.1.4), when the Vertical Guidance Operational Procedure (10.2)
     »  is Descent Path.
1410
1411 this case to verify when the Vertical Guidance Operational Procedure is not Descent P
     » ath,
1412 SRD Reference:  VGUIDE_SRD_7006
1413
1414
1415 INPUT
     »                          VALUE
1416 ------------------------------------------------------------------------------------
     » -------------  --------------------------
1417 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call
     »                                    TRUE
1418 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
     »                                  MASTER
1419 VG_HS_DPKG.DATA.FLTPHASE
     »                                  CRUISE
1420 VG_INPUTS_INT_DPKG.ACALT.ALT
     »                                 21000.0
1421 VG_INPUTS_INT_DPKG.CRZALT
     »                                 26000.0
1422 VG_INPUTS_INT_DPKG.CRZALTVAL
     »                                    TRUE
1423 VG_INPUTS_INT_DPKG.FCCSELALT
     »                                 14000.0
1424 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT
     »                                 21000.0
1425 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL
     »                                    TRUE
1426 VG_ONLY_INT_DPKG.NXTDESTGT
     »                                -1000.0
1427 VG_ONLY_INT_DPKG.STEPCLBAHD
     »                                    TRUE
1428 VG_ONLY_INT_DPKG.VGREFALT
     »                                 25000.0
1429 VG_OUTPUTS_INT_DPKG.OPPROC
     »                               Crzlevel
```

File: CTP_MD11_VG_SEL_ALT_TGT.rst (continued)

```
      1430 VG_OUTPUTS_INT_DPKG.VGALTTGTVL
           »                                        FALSE
      1431 Vg_Inputs_Int_Dpkg.Fccengdmode
           »                               Alt_Capt_Speed
      1432 VG_OUTPUTS_INT_DPKG.VGALTTGT
           »                                     24900.0
      1433 VG_ONLY_INT_DPKG.DESTGTALT
           »                                     25000.0
      1434
      1435
      1436 OUTPUT                                                                EXPECTED
           »   TOLERANCE              ACTUAL            P/F
      1437 ------------------------------------------------------  ------------------------------
           » -------------  --------------------------  ----
      1438 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                                        24900.0
           »           0.0                 2.49000E+04  P
      1439
      1440
      1441 ====> All 1 Comparisons Passed <====
      1442
      1443
      1444 Test End Time: Apr 25 15:33:14 2013
1347  1445 Test Generation System (TGS) Version v4.5.2, ps4082887-103
1348  1446 Current Program Library
1349       ~~   c:\builds\md11\922_408\hads_root\a29_cert_system.alb (root)~~
1350       ~~   c:\builds\md11\922_408\common_software\pegasus_29050_v014\acm$ada_lib.alb~~
1351       ~~   c:\builds\md11\922_408\bld_922_408\libraries\com.alb~~
1352       ~~   C:\BUILDS\md11\922_408\BLD_922_408\Libraries\FM.alb~~
1353       ~~   D:\Exercise and task\VC\New Folder\CTP_MD11_VG_SEL_ALT_TGT\my_FM.alb~~
      1447    c:\builds\md11\922_604\hads_root\a29_cert_system.alb (root)
      1448    c:\builds\md11\922_604\common_software\pegasus_29050_v014\acm$ada_lib.alb
      1449    c:\builds\md11\922_604\bld_922_604\libraries\com.alb
      1450    C:\BUILDS\md11\922_604\BLD_922_604\Libraries\FM.alb
      1451    D:\MD11\17011\CTP_MD11_VG_SEL_ALT_TGT\my_FM.alb
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF

```
1  1  FILE:                    CTP_MD11_VG_SEL_ALT_TGT.TDF
2  2
3  3  TITLE:                   Vertical Guidance Select Altitude Target
4  4
5  5  SOURCE CONFIGURATION:    ISS
6  6
7  7  AUTHOR:                  Keith Scherrer
8  8
9  9  TRANSLATED BY:           Gerald J. Molczyk / David M. Hall    DATE: 06-Jun-97
10 10
11 11 MODIFIED BY:             Dennis Kenney / David M. Hall / Christian Sarraf
12 12
13 13 PACKAGE:                 VG_ALTITUDE_TARGET_PKG
14 14
15 15 PROCEDURE:               SELECT_ALT_TARGET
16 16
17 17 PURPOSE:                 This test is to verify that the Next Altitude Target
18 18                          and Altitude Tape Target are correctly selected for
19 19                          each operational scenario.
20
   20
   21 ------------------------------------------------------------------------
   »
   22 MODIFIED BY            :  DUN, QING
   23 DATE                  :  25 APR 2013
   24 CHECKED UNDER SCR      :  17011.01
   25 BUILD  USED            :  MD11_922_604
   26 SRD NAME & VERSION   :  VG_MDXX_ALT_TGT_PFD.SRD, 6
   27 MODIFICATIONS           :  1. Renumber the TESTID as the same TESTID
   28                           2. Added TCs 32-33 to test the anchor VGUIDE_SRD_7006 as p
   » er SCR 17011.00
   29                           3. Modify TC 15 to test the anchor VGUIDE_SRD_7006 as per
   » SCR 17011.00
   30
   31 ------------------------------------------------------------------------
   »
   32
21 33 -- NOTES:
22 34 -- (1) Original Script:
23 35 --      Element Name:   VGSELALTTGT.PAS
24 36 --      Last Modified:  16-AUG-1994 10:46:38.64
25 37 --      Author Name:    Keith Scherrer
26 38 --
27 39 -- (2) Revision History:
28 40 --      Element Name:   CTP_VG_SELECT_ALT_TARGET.TDF
29 41 --      Translated:     06-JUN-1997
30 42 --      Translators:    Gerald J. Molczyk / David M. Hall
31 43 --      NOTES:          Ported from scaled Pascal to Ada. Revised for the
32 44 --                      MD11 program.
33 45 --
34 46 -- (3) Revision History:
35 47 --      Element Name:   CTP_717_VG_SELECT_ALT_TGT.TDF
36 48 --      Last Modified:  24-SEP-1998
37 49 --      Modified by::   Dennis Kenney / David M. Hall / Christian Sarraf
38 50 --      NOTES:          Revised for the MDXX program.
39 51 --
40 52 -- (4) Revision History:
41 53 --      Element Name:   CTP_MD10_VG_SEL_ALT_TGT.TDF
42 54 --      Last Modified:  24-JUL-1999
43 55 --      Modified by:    Christian Sarraf
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
44  56 --      NOTES:          Revised for the MD10 program.
45  57 --
46  58 -- (5) Revision History:
47  59 --      Element Name:   CTP_717C2_VG_SEL_ALT_TGT.TDF
48  60 --      Last Modified:  20-Feb-2000
49  61 --      Modified by:    Christian Sarraf
50  62 --      NOTES:          Revised for the 717C2 program.
51  63 --
52  64 -- (6) Revision History:
53  65 --      Element Name:   CTP_MD11_VG_SEL_ALT_TGT.TDF
54  66 --      Last Modified:  29-Jun-2000
55  67 --      Modified by:    Christian Sarraf
56  68 --      NOTES:          Revised for the MD11 program.
57  69
58  70
59  71 TRACEABILITY TO REQUIREMENTS/CODE:
60  72
61  73 -- ANCHOR  : MD11_VG_TEST_2059
62  74 -- SOURCE  : VGUIDE_SRD_7000
63  75
64  76 -- ANCHOR  : MD11_VG_TEST_2057
65  77 -- SOURCE  : VGUIDE_SRD_7002
66  78
67  79 -- ANCHOR  : MD11_VG_TEST_2018
68  80 -- SOURCE  : VGUIDE_SRD_7003
69  81
70  82 -- ANCHOR  : MD11_VG_TEST_3830
71  83 -- SOURCE  : VGUIDE_SRD_7004
72  84
73  85 -- ANCHOR  : MD11_VG_T     _3831
74  86 -- SOURCE  : VGUIDE_SRD_7006
75  87
76  88 -- ANCHOR  : MD11_VG_TEST_2019
77  89 -- SOURCE  : VGUIDE_SRD_7007
78  90
79  91 -- ANCHOR  : MD11_VG_TEST_3832
80  92 -- SOURCE  : VGUIDE_SRD_7008
81  93
82  94 -- ANCHOR  : MD11_VG_TEST_3833
83  95 -- SOURCE  : VGUIDE_SRD_7009
84  96
85  97 -- ANCHOR  : MD11_VG_TEST_2020
86  98 -- SOURCE  : VGUIDE_SRD_7010
87  99
88 100 -- ANCHOR  : MD11_VG_TEST_3834
89 101 -- SOURCE  : VGUIDE_SRD_7011
90 102
91 103 -- ANCHOR  : MD11_VG_TEST_3835
92 104 -- SOURCE  : VGUIDE_SRD_7012
93 105
94 106 -- ANCHOR  : MD11_VG_TEST_3836
95 107 -- SOURCE  : VGUIDE_SRD_7013
96 108
97 109 -- ANCHOR  : MD11_VG_TEST_3837
98 110 -- SOURCE  : VGUIDE_SRD_7015
99 111
100 112 -- ANCHOR  : MD11_VG_TEST_3838
101 113 -- SOURCE  : VGUIDE_SRD_7017
102 114
103 115 -- ANCHOR  : MD11_VG_TEST_1178
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
104 116 -- SOURCE  : VGUIDE_SRD_2902
105 117
106 118 -- ANCHOR  : MD11_VG_TEST_1104
107 119 -- SOURCE  : VGUIDE_SRD_8005
108 120
109 121 -- ANCHOR  : MD11_VG_TEST_1278
110 122 -- SOURCE  : VGUIDE_SRD_5205
111 123
112 124 -- ANCHOR  : MD11_VG_TEST_1202
113 125 -- SOURCE  : VGUIDE_SRD_5206
114 126
115 127 -- ANCHOR  : MD11_VG_TEST_1357
116 128 -- SOURCE  : VGUIDE_SRD_3041
117 129
118 130 -- ANCHOR  : MD11_VG_TEST_1303
119 131 -- SOURCE  : VGUIDE_SRD_5304
120 132
121 133 -- ANCHOR  : MD11_VG_TEST_1417
122 134 -- SOURCE  : VGUIDE_SRD_3026
123 135
124 136 -- ANCHOR  : MD11_VG_TEST_1403
125 137 -- SOURCE  : VGUIDE_SRD_5618
126 138
127 139 -- ANCHOR  : MD11_VG_TEST_1513
128 140 -- SOURCE  : VGUIDE_SRD_2837
129 141
130 142 -- ANCHOR  : MD11_VG_TEST_1503
131 143 -- SOURCE  : VGUIDE_SRD_5655
132 144
133 145 -- ANCHOR  : MD11_VG_TEST_3282
134 146 -- SOURCE  : VGUIDE_SRD_3072
135 147
136 148 -- ANCHOR  : MD11_VG_TEST_3283
137 149 -- SOURCE  : VGUIDE_SRD_3103
138 150
139 151 -- ANCHOR  : MD11_VG_TEST_3284
140 152 -- SOURCE  : VGUIDE_SRD_3221
141 153
142 154 -- ANCHOR  : MD11_VG_TEST_3285
143 155 -- SOURCE  : VGUIDE_SRD_3150
144 156
145 157 -- ANCHOR  : MD11_VG_TEST_3286
146 158 -- SOURCE  : VGUIDE_SRD_3190
147 159
148 160 -- ANCHOR  : MD11_VG_TEST_3287
149 161 -- SOURCE  : VGUIDE_SRD_2810
150 162
151 163 -- ANCHOR  : MD11_VG_TEST_3288
152 164 -- SOURCE  : VGUIDE_SRD_2848
153 165
154 166 -- ANCHOR  : MD11_VG_TEST_3289
155 167 -- SOURCE  : VGUIDE_SRD_2891
156 168
157 169 -- ANCHOR  : MD11_VG_TEST_3899
158 170 -- SOURCE  : VGUIDE_SRD_8286
159 171
160 172 -- ANCHOR  : MD11_VG_TEST_3823
161 173 -- SOURCE  : VGUIDE_SRD_8235
162 174
163 175 -- ANCHOR  : MD11_VG_TEST_3824
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
164  176 -- SOURCE  : VGUIDE_SRD_8201
165  177
166  178 -- ANCHOR  : MD11_VG_TEST_3825
167  179 -- SOURCE  : VGUIDE_SRD_8152
168  180
169  181 -- ANCHOR  : MD11_VG_TEST_3826
170  182 -- SOURCE  : VGUIDE_SRD_8118
171  183
172  184 -- ANCHOR  : MD11_VG_TEST_3827
173  185 -- SOURCE  : VGUIDE_SRD_2840
174  186
175  187 -- ANCHOR  : MD11_VG_TEST_3828
176  188 -- SOURCE  : VGUIDE_SRD_5555
177  189
178  190 -- ANCHOR  : MD11_VG_TEST_3829
179  191 -- SOURCE  : VGUIDE_SRD_2894
180  192
181  193
182  194
183  195 VERIFY COMPLIANCE WITH SRD SECTION:
184  196
185  197  MD11 Vertical Guidance Altitude Target
186  198
187  199  Vertical Guidance Altitude Target (Airmass Ascent).....10.2.1.3
188  200  Vertical Guidance Altitude Target (Clb Intermediate Level)... 10.2.2.3
189  201  Vertical Guidance Altitude Target (Cruise Level).....10.2.3.3
190  202  Vertical Guidance Altitude Target (Descent Path).....10.2.4.3
191  203  Vertical Guidance Altitude Target (Desc Int Level).....10.2.5.3
192  204  Vertical Guidance Altitude Target (Early Descent).....10.2.6.3
193  205  Vertical Guidance Altitude Target (Late Descent).....10.2.7.3
194  206  Vertical Guidance Altitude Target (Desc Path Overspd).....10.2.8.3
195  207  Vertical Guidance Altitude Target (HM).....10.2.9.3
196  208  Vertical Guidance Altitude Target (Airmass Descent).....10.2.10.3
197  209  Vertical Guidance Altitude Target (EO Takeoff).....10.2.11.3
198  210  Vertical Guidance Altitude Target (EO Takeoff Level Acc).....10.2.12.3
199  211  Vertical Guidance Altitude Target (Engine-out Driftdown).....10.2.13.3
200  212
201  213  Altitude Target and Next Altitude Target for Display On The PFD Altitude Tape (10.4.
          » 2)
202  214  (Altitude Target).....10.4.2.1
203  215  (Next Altitude Target).....10.4.2.2
204  216
205  217
206  218
207  219 OVERALL TESTING APPROACH:
208  220
209  221 Tool Used:      Instruction Set Simulator
210  222
211  223 Description:    This test procedure verifies the SRD requirements for
212  224                 VG_ALTITUDE_TARGET_PKG.SELECT_ALT_TARGET. The Test Generated
213  225                 System (TGS), running under the ISS platform, was chosen to
214  226                 enable automated testing for both structural coverage and
215  227                 testing of the requirements.
216  228
217  229 Setup:          The driver CTP_MD11_VG_SEL_ALT_TGT.DRV is
218  230                 compiled and linked against the current library containing the
219  231                 library under test. Use departmental symbols and logicals to
220  232                 run this test. The minimal files needed to run this test are:
221  233                 CTP_MD11_VG_SEL_ALT_TGT.DRV,
222  234                 CTP_MD11_VG_SEL_ALT_TGT.DPN,
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
223 235                 CTP_MD11_VG_SEL_ALT_TGT.TDF.
224 236
225 237 Disposition:    TBD
226 238
227 239 ****************************************************************
228 240 INITIALIZATIONS:
229 241
230 242 FP_DEF_TOL = 0.0
231 243
232 244 define symbol AIRMASSASCNT := Opproctyp_Types.AIRMASSASCNT
233 245 define symbol CLBINTLEVEL  := Opproctyp_Types.CLBINTLEVEL
234 246 define symbol EOTAKEOFF    := Opproctyp_Types.EOTAKEOFF
235 247 define symbol EOLEVELACCEL := Opproctyp_Types.EOLEVELACCEL
236 248 define symbol CRZLEVEL     := Opproctyp_Types.CRZLEVEL
237 249 define symbol DESCENTPATH  := Opproctyp_Types.DESCENTPATH
238 250 define symbol DESINTLEVEL  := Opproctyp_Types.DESINTLEVEL
239 251 define symbol LATEDESCENT  := Opproctyp_Types.LATEDESCENT
240 252 define symbol DESPATHOVER  := Opproctyp_Types.DESPATHOVER
241 253 define symbol EARLYDESCENT := Opproctyp_Types.EARLYDESCENT
242 254 define symbol HOLDTOMANUAL := Opproctyp_Types.HOLDTOMANUAL
243 255 define symbol AIRMASSDSCNT := Opproctyp_Types.AIRMASSDSCNT
244 256 define symbol EODRIFTDOWN  := Opproctyp_Types.EODRIFTDOWN
245 257
246 258 define symbol PREFLIGHT := Fmcs_Base_Types.PREFLIGHT
247 259 define symbol TAKEOFF   := Fmcs_Base_Types.TAKEOFF
248 260 define symbol CLIMB     := Fmcs_Base_Types.CLIMB
249 261 define symbol CRUISE    := Fmcs_Base_Types.CRUISE
250 262 define symbol DESCENT   := Fmcs_Base_Types.DESCENT
251 263 define symbol APPROACH  := Fmcs_Base_Types.Flight_Phase_Type'(Fmcs_Base_Types.APPROAC
          » H)
252 264 define symbol GOAROUND  := Fmcs_Base_Types.GOAROUND
253 265 define symbol DONE      := Fmcs_Base_Types.DONE
254 266
255 267 define symbol MASTER := Fmcs_Base_Types.MASTER
256 268
257 269 -- define symbol NONE                 := Fmcs_Mdxx_Base_Types.Mdxx_Engage_Mode_Type'
          » (Fmcs_Mdxx_Base_Types.NONE)
258 270 define symbol WINDSHEAR_MAX_THRUST  := Fmcs_Mdxx_Base_Types.WINDSHEAR_MAX_THRUST
259 271 define symbol PITCH_SPEED           := Fmcs_Mdxx_Base_Types.PITCH_SPEED
260 272 -- define symbol PITCH_IDLE           := Fmcs_Mdxx_Base_Types.PITCH_IDLE
261 273 define symbol ALT_CAPT_SPEED        := Fmcs_Mdxx_Base_Types.ALT_CAPT_SPEED
262 274 define symbol ALT_CAPT_IDLE_THRUST  := Fmcs_Mdxx_Base_Types.ALT_CAPT_IDLE_THRUST
263 275 define symbol ALT_HOLD_SPEED        := Fmcs_Mdxx_Base_Types.ALT_HOLD_SPEED
264 276 define symbol ALT_HOLD_IDLE_THRUST  := Fmcs_Mdxx_Base_Types.ALT_HOLD_IDLE_THRUST
265 277 define symbol SPEED_IDLE_THRUST     := Fmcs_Mdxx_Base_Types.SPEED_IDLE_THRUST
266 278 define symbol SPEED_MAX_THRUST      := Fmcs_Mdxx_Base_Types.SPEED_MAX_THRUST
267 279 define symbol VS_SPEED              := Fmcs_Mdxx_Base_Types.VS_SPEED
268 280 define symbol ALT_HOLD_MAX_THRUST   := Fmcs_Mdxx_Base_Types.ALT_HOLD_MAX_THRUST
269 281 define symbol ALT_CAPT_MAX_THRUST   := Fmcs_Mdxx_Base_Types.ALT_CAPT_MAX_THRUST
270 282 define symbol TOGA_SPEED_MAX_THRUST := Fmcs_Mdxx_Base_Types.TOGA_SPEED_MAX_THRUST
271 283
272 284 SUT_VARS
273 285
274 286 -- enumeration types
275 287 AIRMASSASCNT
276 288 CLBINTLEVEL
277 289 EOTAKEOFF
278 290 EOLEVELACCEL
279 291 CRZLEVEL
280 292 DESCENTPATH
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

281	293	DESINTLEVEL
282	294	LATEDESCENT
283	295	DESPATHOVER
284	296	EARLYDESCENT
285	297	HOLDTOMANUAL
286	298	AIRMASSDSCNT
287	299	EODRIFTDOWN
288	300	
289	301	PREFLIGHT
290	302	TAKEOFF
291	303	CLIMB
292	304	CRUISE
293	305	DESCENT
294	306	APPROACH
295	307	GOAROUND
296	308	DONE
297	309	
298	310	MASTER
299	311	
300	312	-- NONE
301	313	WINDSHEAR_MAX_THRUST
302	314	PITCH_SPEED
303	315	-- PITCH_IDLE
304	316	ALT_CAPT_SPEED
305	317	ALT_CAPT_IDLE_THRUST
306	318	ALT_HOLD_SPEED
307	319	ALT_HOLD_IDLE_THRUST
308	320	SPEED_IDLE_THRUST
309	321	SPEED_MAX_THRUST
310	322	VS_SPEED
311	323	ALT_HOLD_MAX_THRUST
312	324	ALT_CAPT_MAX_THRUST
313	325	TOGA_SPEED_MAX_THRUST
314	326	
315	327	-- variables
316	328	VG_ONLY_INT_DPKG.VGACTIVE
317	329	MDXX_LGBM.ACTPRIMARY
318	330	VG_HS_DPKG.DATA.FLTPHASE
319	331	FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS
320	332	VG_INPUTS_INT_DPKG.ACALT.ALT
321	333	VG_INPUTS_INT_DPKG.CRZALT
322	334	VG_INPUTS_INT_DPKG.CRZALTVAL
323	335	VG_INPUTS_INT_DPKG.FCCENGDMODE
324	336	VG_INPUTS_INT_DPKG.FCCSELALT
325	337	VG_INPUTS_INT_DPKG.MDA().ALT
326	338	VG_INPUTS_INT_DPKG.MDA().VAL
327	339	MDXX_LGB_TPKG.ACTPRIMARY
328	340	VG_ONLY_INT_DPKG.DESTGTALT
329	341	VG_ONLY_INT_DPKG.NXTCLBTGT
330	342	VG_ONLY_INT_DPKG.NXTDESTGT
331	343	VG_ONLY_INT_DPKG.STEPCLBAHD
332	344	VG_ONLY_INT_DPKG.VGREFALT
333	345	VG_OUTPUTS_INT_DPKG.ALTTAPETGT
334	346	VG_OUTPUTS_INT_DPKG.NXTALTTGT
335	347	VG_OUTPUTS_INT_DPKG.NXTALTTGTV
336	348	VG_OUTPUTS_INT_DPKG.OPPROC
337	349	VG_OUTPUTS_INT_DPKG.VGALTTGT
338	350	VG_OUTPUTS_INT_DPKG.VGALTTGTVL
339	351	VG_AC_UNIQUE_PKG.ALTITUDE_BUG_ALLOWED
340	352	Test_VG_SELECT_ALT_TARGET.test_for_FCC_call

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
341  353 VG_INPUTS_INT_DPKG.AIRBORNE
342  354 VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE
343  355 VG_INPUTS_INT_DPKG.MINIMUM_CERTIFIED_ALTITUDE
344  356
345  357 END_SUT_VARS
346  358
347  359 ****************************************************************
348  360
349  361
350  362 -- TESTID: XX1
351  363
352  364 -- Test Name:   VGSELALT_XX1
353  365 -- Altitude Target and Next Altitude Target for Display on the PFD Altitude Tape comp
     » uted at 10Hz
354  366 -- SRD REFERENCE 10.4.2 a. (VGUIDE_SRD_7002, MD11_VG_TEST_2057)
355  367 --
356  368 -- The Altitude Target and Next Altitude Target for Display On The PFD Altitude Tape
357  369 -- is computed through the EXECUTE procedure contained in VG_EXEC (which calls the
358  370 -- VG_FCC_ALTITUDE_TARGET_PKG and VG_EIS_ALTITUDE_TARGET_PKG modules) which is in tur
     » n called by the GUIDANCE_EXECUTIVE
359  371 -- (ACM Gen:15) using procedure EXECUTE_FAST_PROCESSES at a rate of 10Hz.
360  372 --
361  373 --
362  374 -- NOTES:
363  375 --
364  376 -- FM_MAIN is the "entry point" for the FM partition,
365  377 -- it creates and starts the processes in the FM partition
366  378 -- and calls OPS_FMF_FOREGROUND.
367  379 --
368  380 -- OPS_FMF_FOREGROUND is the module that starts the FMF
369  381 -- foreground processes. It is a high level executive for
370  382 -- all periodic processing in the FM partition and calls
371  383 -- GUIDANCE_EXECUTIVE.
372  384 --
373  385 -- GUIDANCE_EXECUTIVE provides all the elements necessary
374  386 -- to control both vertical and lateral guidance, including
375  387 -- start-up init logic, slow and fast guidance processing, etc.
376  388 -- It calls the VG_EXEC module which controls the vertical guidance
377  389 -- data and execution.
378  390 --
379  391 -- VG_EXEC module contains the EXECUTE procedure which controls the
380  392 -- execution flow for all vertical guidance modules.
381  393 --
382  394 --
383  395
384  396
385  397 -- TESTID: XX2
386  398
387  399 -- Test Name:   VGSELALT_XX2
388  400 -- SRD REFERENCE 10.2.1.3   Vertical Guidance Altitude Target (Airmass Ascent)
     »   (VGUIDE_SRD_2902, MD11_VG_TEST_1178)
389  401 -- SRD REFERENCE 10.2.2.3   Vertical Guidance Altitude Target (Clb Intermediate Level
     » ) (VGUIDE_SRD_5205, MD11_VG_TEST_1278)
390  402 -- SRD REFERENCE 10.2.3.3   Vertical Guidance Altitude Target (Cruise Level)
     »   (VGUIDE_SRD_3041, MD11_VG_TEST_1357)
391  403 -- SRD REFERENCE 10.2.4.3   Vertical Guidance Altitude Target (Descent Path)
     »   (VGUIDE_SRD_3072, MD11_VG_TEST_3282)
392  404 -- SRD REFERENCE 10.2.5.3   Vertical Guidance Altitude Target (Desc Int Level)
     »   (VGUIDE_SRD_3103, MD11_VG_TEST_3283)
393  405 -- SRD REFERENCE 10.2.6.3   Vertical Guidance Altitude Target (Early Descent)
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
      |      |»   (VGUIDE_SRD_3221, MD11_VG_TEST_3284)
  394 |  406 |-- SRD REFERENCE 10.2.7.3   Vertical Guidance Altitude Target (Late Descent)
      |      |»   (VGUIDE_SRD_3150, MD11_VG_TEST_3285)
  395 |  407 |-- SRD REFERENCE 10.2.8.3   Vertical Guidance Altitude Target (Desc Path Overspd)
      |      |»   (VGUIDE_SRD_3190, MD11_VG_TEST_3286)
  396 |  408 |-- SRD REFERENCE 10.2.9.3   Vertical Guidance Altitude Target (HM)
      |      |»   (VGUIDE_SRD_2810, MD11_VG_TEST_3287)
  397 |  409 |-- SRD REFERENCE 10.2.10.3  Vertical Guidance Altitude Target (Airmass Descent)
      |      |»   (VGUIDE_SRD_2848, MD11_VG_TEST_3288)
  398 |  410 |-- SRD REFERENCE 10.2.11.3  Vertical Guidance Altitude Target (EO Takeoff)
      |      |»   (VGUIDE_SRD_3026, MD11_VG_TEST_1417)
  399 |  411 |-- SRD REFERENCE 10.2.12.3  Vertical Guidance Altitude Target (EO Takeoff Level Acc)
      |      |»   (VGUIDE_SRD_2837, MD11_VG_TEST_1513)
  400 |  412 |-- SRD REFERENCE 10.2.13.3  Vertical Guidance Altitude Target (EO Driftdown)
      |      |»   (VGUIDE_SRD_2891, MD11_VG_TEST_3289)
  401 |  413 |--
  402 |  414 |-- The Vertical Guidance Altitude Target is computed through the EXECUTE procedure
  403 |  415 |-- contained in VG_EXEC (which calls the VG_FCC_ALTITUDE_TARGET_PKG and VG_EIS_ALTITU
      |      |» DE_TARGET_PKG) which
  404 |  416 |-- is in turn called by the GUIDANCE_EXECUTIVE using procedure EXECUTE_FAST_PROCESSES
      |      |»  at
  405 |  417 |-- a rate of 10Hz.
  406 |  418 |--
  407 |  419 |--
  408 |  420 |-- NOTES:
  409 |  421 |--
  410 |  422 |-- FM_MAIN is the "entry point" for the FM partition,
  411 |  423 |-- it creates and starts the processes in the FM partition
  412 |  424 |-- and calls OPS_FMF_FOREGROUND.
  413 |  425 |--
  414 |  426 |-- OPS_FMF_FOREGROUND is the module that starts the FMF
  415 |  427 |-- foreground processes. It is a high level executive for
  416 |  428 |-- all periodic processing in the FM partition and calls
  417 |  429 |-- GUIDANCE_EXECUTIVE.
  418 |  430 |--
  419 |  431 |-- GUIDANCE_EXECUTIVE provides all the elements necessary
  420 |  432 |-- to control both vertical and lateral guidance, including
  421 |  433 |-- start-up init logic, slow and fast guidance processing, etc.
  422 |  434 |-- It calls the VG_EXEC module which controls the vertical guidance
  423 |  435 |-- data and execution.
  424 |  436 |--
  425 |  437 |-- VG_EXEC module contains the EXECUTE procedure which controls the
  426 |  438 |-- execution flow for all vertical guidance modules.
  427 |  439 |--
  428 |  440 |--
  429 |  441 |
  430 |  442 |
  431 |  443 |TESTID: 1
  432 |  444 |
  433 |  445 |Test Name:   VGSELALT_001
  434 |  446 |The altitude and next altitude Target shall be invalid when the guidance/control/annu
      |      |» nciation criteria
  435 |  447 |(as defined in 10.1.1) are not satisfied.
  436 |  448 |SRD Reference: 10.4.2 b. (VGUIDE_SRD_7000, MD11_VG_TEST_2059)
  437 |  449 |Notes: Vertical Guidance Active (Vgactive).  True means all the conditions for allowi
      |      |» ng Vertical Guidance
  438 |  450 |to be active are true.  These conditions are explicitly stated in SRD Section 10.1.1.
      |      |» 1b. and comprise
  439 |  451 |the guidance process, the control process, and the annunciation process.
  440 |  452 |
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
441 453
442 454 -- INPUTS:
443 455 Vg_Inputs_Int_Dpkg.Minimum_Certified_Altitude         := -1000.0
444 456 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
445 457 VG_INPUTS_INT_DPKG.AIRBORNE                          := TRUE
446 458 VG_ONLY_INT_DPKG.VGACTIVE                           := FALSE
447 459
448 460 !run_test ()
449 461
450 462 -- OUTPUTS:
451 463 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                   = FALSE
452 464 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                   = FALSE
453 465
454 466
455 467 TESTID: 2
456 468
457 469 Test Name:   VGSELALT_002
458 470 Altitude Target
459 471 SRD Reference: 10.4.2.1
460 472
461 473
462 474 -- INPUTS:
463 475 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
464 476 VG_ONLY_INT_DPKG.VGACTIVE                           := TRUE
465 477 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS            := MASTER
466 478 VG_HS_DPKG.DATA.FLTPHASE                            := CRUISE
467 479 VG_INPUTS_INT_DPKG.CRZALT                           := 25000.0
468 480 VG_INPUTS_INT_DPKG.CRZALTVAL                        := TRUE
469 481 VG_ONLY_INT_DPKG.VGREFALT                          := 20000.0
470 482 VG_OUTPUTS_INT_DPKG.OPPROC                         := CLBINTLEVEL
471 483 VG_OUTPUTS_INT_DPKG.VGALTTGT                       := 22000.0
472 484 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
473 485 VG_ONLY_INT_DPKG.NXTCLBTGT                         := 18000.0
474 486 VG_INPUTS_INT_DPKG.ACALT.ALT                       := 21000.0
475 487 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
476 488 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
477 489
478 490 !run_test ()
479 491
480 492 -- OUTPUTS:
481 493 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                = TRUE
482 494 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                = 22000.0
483 495 VG_OUTPUTS_INT_DPKG.NXTALTTGT                 = 25000.0
484 496 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                = TRUE
485 497
486 498
487 499 TESTID: 3
488 500
489 501 Test Name:   VGSELALT_003
490 502 Altitude Target
491 503 SRD Reference: 10.4.2.1
492 504
493 505
494 506 -- INPUTS:
495 507 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
496 508 VG_ONLY_INT_DPKG.VGACTIVE                           := TRUE
497 509 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS            := MASTER
498 510 VG_OUTPUTS_INT_DPKG.OPPROC                         := AIRMASSASCNT
499 511 VG_HS_DPKG.DATA.FLTPHASE                            := CRUISE
500 512 VG_INPUTS_INT_DPKG.ACALT.ALT                       := 21000.0
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
501  513 VG_INPUTS_INT_DPKG.CRZALT                              := 25000.0
502  514 VG_INPUTS_INT_DPKG.CRZALTVAL                           := TRUE
503  515 VG_ONLY_INT_DPKG.VGREFALT                              := 20000.0
504  516 VG_OUTPUTS_INT_DPKG.VGALTTGT                           := 22000.0
505  517 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                         := TRUE
506  518 VG_ONLY_INT_DPKG.NXTCLBTGT                             := 18000.0
507  519 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT   := 21000.0
508  520 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL   := FALSE
509  521
510  522 !run_test ()
511  523
512  524 -- OUTPUTS:
513  525 VG_OUTPUTS_INT_DPKG.VGALTTGTVL = TRUE
514  526 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 22000.0
515  527 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 25000.0
516  528 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
517  529
518  530
519  531 TESTID: 4
520  532
521  533 Test Name:   VGSELALT_004
522  534 Altitude Target
523  535 SRD Reference: 10.4.2.1
524  536
525  537
526  538 -- INPUTS:
527  539 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
528  540 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
529  541 VG_HS_DPKG.DATA.FLTPHASE                              := TAKEOFF
530  542 VG_INPUTS_INT_DPKG.ACALT.ALT                         := 21000.0
531  543 VG_INPUTS_INT_DPKG.CRZALT                           := 25000.0
532  544 VG_INPUTS_INT_DPKG.CRZALTVAL                        := TRUE
533  545 VG_ONLY_INT_DPKG.VGREFALT                           := 20000.0
534  546 VG_OUTPUTS_INT_DPKG.OPPROC                          := CLBINTLEVEL
535  547 VG_OUTPUTS_INT_DPKG.VGALTTGT                        := 20000.0
536  548 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                      := TRUE
537  549 VG_ONLY_INT_DPKG.NXTCLBTGT                          := 18000.0
538  550 VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE       := 19000.0
539  551 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT := 21000.0
540  552 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL := FALSE
541  553
542  554 !run_test ()
543  555
544  556 -- OUTPUTS:
545  557 VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE  = 19000.0
546  558 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                 = 20000.0
547  559 VG_OUTPUTS_INT_DPKG.NXTALTTGT                  = 18000.0
548  560 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                = TRUE
549  561
550  562
551  563 TESTID: 5
552  564
553  565 Test Name:   VGSELALT_005
554  566 Altitude Target
555  567 SRD Reference: 10.4.2.1
556  568
557  569
558  570 -- INPUTS:
559  571 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
560  572 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
561  573 VG_HS_DPKG.DATA.FLTPHASE                                := TAKEOFF
562  574 VG_INPUTS_INT_DPKG.ACALT.ALT                           := 21000.0
563  575 VG_INPUTS_INT_DPKG.CRZALT                              := 25000.0
564  576 VG_INPUTS_INT_DPKG.CRZALTVAL                           := TRUE
565  577 VG_ONLY_INT_DPKG.VGREFALT                              := 20000.0
566  578 VG_OUTPUTS_INT_DPKG.OPPROC                             := CLBINTLEVEL
567  579 VG_OUTPUTS_INT_DPKG.VGALTTGT                           := 20000.0
568  580 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                         := TRUE
569  581 VG_ONLY_INT_DPKG.NXTCLBTGT                             := 18000.0
570  582 VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE          := 18000.0
571  583 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT   := 21000.0
572  584 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL   := FALSE
573  585
574  586 !run_test ()
575  587
576  588 -- OUTPUTS:
577  589 VG_INPUTS_INT_DPKG.MAXIMUM_CERTIFIED_ALTITUDE  = 18000.0
578  590 VG_INPUTS_INT_DPKG.CRZALT                      = 25000.0
579  591 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                = 20000.0
580  592 VG_OUTPUTS_INT_DPKG.NXTALTTGT                 = 25000.0
581  593 VG_OUTPUTS_INT_DPKG.NXTALTTGTV                = TRUE
582  594
583  595
584  596
585  597 TESTID: 6
586  598
587  599 Test Name:   VGSELALT_006
588  600 Next Altitude Target
589  601 SRD Reference: 10.4.2.2
590  602
591  603
592  604 -- INPUTS:
593  605 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call          := FALSE
594  606 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS           := MASTER
595  607 VG_HS_DPKG.DATA.FLTPHASE                            := CRUISE
596  608 VG_INPUTS_INT_DPKG.ACALT.ALT                       := 21000.0
597  609 VG_INPUTS_INT_DPKG.CRZALT                          := 25000.0
598  610 VG_INPUTS_INT_DPKG.CRZALTVAL                       := TRUE
599  611 VG_ONLY_INT_DPKG.NXTCLBTGT                         := 18000.0
600  612 VG_ONLY_INT_DPKG.VGREFALT                          := 20000.0
601  613 VG_OUTPUTS_INT_DPKG.OPPROC                         := CLBINTLEVEL
602  614 VG_OUTPUTS_INT_DPKG.VGALTTGT                       := 22000.0
603  615 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := FALSE
604  616 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
605  617 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
606  618
607  619 !run_test ()
608  620
609  621 -- OUTPUTS:
610  622 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 25000.0
611  623 VG_INPUTS_INT_DPKG.CRZALT      = 25000.0
612  624 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
613  625 VG_OUTPUTS_INT_DPKG.VGALTTGTVL = FALSE
614  626
615  627
616  628 TESTID: 7
617  629
618  630 Test Name:   VGSELALT_007
619  631 Next Altitude Target
620  632 SRD Reference:  10.4.2.2
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
621  633
622  634
623  635 -- INPUTS:
624  636 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
625  637 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
626  638 VG_HS_DPKG.DATA.FLTPHASE                             := CLIMB
627  639 VG_INPUTS_INT_DPKG.ACALT.ALT                         := 21000.0
628  640 VG_INPUTS_INT_DPKG.CRZALT                           := 25000.0
629  641 VG_ONLY_INT_DPKG.NXTCLBTGT                          := 19000.0
630  642 VG_ONLY_INT_DPKG.VGREFALT                           := 20000.0
631  643 VG_OUTPUTS_INT_DPKG.OPPROC                          := AIRMASSASCNT
632  644 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                      := FALSE
633  645 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 22000.0
634  646 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
635  647
636  648 !run_test ()
637  649
638  650 -- OUTPUTS:
639  651 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 19000.0
640  652 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
641  653 VG_OUTPUTS_INT_DPKG.VGALTTGTVL = FALSE
642  654
643  655
644  656 TESTID: 8
645  657
646  658 Test Name:   VGSELALT_008
647  659 Next Altitude Target
648  660 SRD Reference:  10.4.2.2
649  661
650  662
651  663 -- INPUTS:
652  664 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
653  665 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
654  666 VG_HS_DPKG.DATA.FLTPHASE                             := TAKEOFF
655  667 VG_INPUTS_INT_DPKG.ACALT.ALT                         := 21000.0
656  668 VG_INPUTS_INT_DPKG.CRZALT                           := 25000.0
657  669 VG_INPUTS_INT_DPKG.CRZALTVAL                        := FALSE
658  670 VG_ONLY_INT_DPKG.NXTCLBTGT                          := 20000.0
659  671 VG_ONLY_INT_DPKG.VGREFALT                           := 20000.0
660  672 VG_OUTPUTS_INT_DPKG.OPPROC                          := CLBINTLEVEL
661  673 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                      := TRUE
662  674 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
663  675 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
664  676
665  677 !run_test ()
666  678
667  679 -- OUTPUTS:
668  680 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 20000.0
669  681 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
670  682
671  683
672  684 TESTID: 9
673  685
674  686 Test Name:   VGSELALT_009
675  687 Next Altitude Target
676  688 SRD Reference:  10.4.2.2
677  689
678  690
679  691 -- INPUTS:
680  692 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
681  693 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
682  694 VG_HS_DPKG.DATA.FLTPHASE                              := CRUISE
683  695 VG_INPUTS_INT_DPKG.ACALT.ALT                          := 21000.0
684  696 VG_INPUTS_INT_DPKG.CRZALT                             := 25000.0
685  697 VG_INPUTS_INT_DPKG.CRZALTVAL                          := TRUE
686  698 VG_ONLY_INT_DPKG.NXTCLBTGT                           := 18000.0
687  699 VG_ONLY_INT_DPKG.VGREFALT                            := 20000.0
688  700 VG_OUTPUTS_INT_DPKG.OPPROC                           := CLBINTLEVEL
689  701 VG_OUTPUTS_INT_DPKG.VGALTTGT                         := 22000.0
690  702 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                       := TRUE
691  703 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
692  704 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
693  705
694  706 !run_test ()
695  707
696  708 -- OUTPUTS:
697  709 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 25000.0
698  710 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
699  711
700  712
701  713 TESTID: 10
702  714
703  715 Test Name:   VGSELALT_010
704  716 Next altitude Target
705  717 SRD Reference:  10.4.2.2
706  718
707  719
708  720 -- INPUTS:
709  721 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
710  722 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
711  723 VG_HS_DPKG.DATA.FLTPHASE                              := CRUISE
712  724 VG_INPUTS_INT_DPKG.ACALT.ALT                          := 21000.0
713  725 VG_INPUTS_INT_DPKG.CRZALT                             := 23000.0
714  726 VG_INPUTS_INT_DPKG.CRZALTVAL                          := TRUE
715  727 VG_ONLY_INT_DPKG.NXTCLBTGT                           := 18000.0
716  728 VG_ONLY_INT_DPKG.VGREFALT                            := 20000.0
717  729 VG_OUTPUTS_INT_DPKG.OPPROC                           := CLBINTLEVEL
718  730 VG_OUTPUTS_INT_DPKG.VGALTTGT                         := 22000.0
719  731 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                       := TRUE
720  732 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
721  733 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
722  734
723  735 !run_test ()
724  736
725  737 -- OUTPUTS:
726  738 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 23000.0
727  739 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
728  740
729  741
730  742 TESTID: 11
731  743
732  744 Test Name:   VGSELALT_011
733  745 Next altitude Target
734  746 SRD Reference:  10.4.2.2
735  747
736  748
737  749 -- INPUTS:
738  750 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
739  751 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
740  752 VG_HS_DPKG.DATA.FLTPHASE                              := CRUISE
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
741  753 VG_INPUTS_INT_DPKG.ACALT.ALT                            := 21000.0
742  754 VG_INPUTS_INT_DPKG.CRZALT                               := 27000.0
743  755 VG_ONLY_INT_DPKG.NXTCLBTGT                              := 15000.0
744  756 VG_ONLY_INT_DPKG.VGREFALT                               := 20000.0
745  757 VG_OUTPUTS_INT_DPKG.OPPROC                              := AIRMASSASCNT
746  758 VG_OUTPUTS_INT_DPKG.VGALTTGT                            := 25500.0
747  759 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                          := TRUE
748  760 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
749  761 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
750  762
751  763 !run_test ()
752  764
753  765 -- OUTPUTS:
754  766 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 27000.0
755  767 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
756  768
757  769
758  770 TESTID: 12
759  771
760  772 Test Name:   VGSELALT_012
761  773 Next altitude Target
762  774 SRD Reference:  10.4.2.2
763  775
764  776
765  777 -- INPUTS:
766  778 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
767  779 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
768  780 VG_HS_DPKG.DATA.FLTPHASE                              := CRUISE
769  781 VG_INPUTS_INT_DPKG.ACALT.ALT                         := 21000.0
770  782 VG_INPUTS_INT_DPKG.CRZALT                            := 26000.0
771  783 VG_INPUTS_INT_DPKG.FCCSELALT                         := 26000.0
772  784 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
773  785 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
774  786 VG_ONLY_INT_DPKG.NXTDESTGT                           := 15000.0
775  787 VG_ONLY_INT_DPKG.VGREFALT                            := 26000.0
776  788 VG_OUTPUTS_INT_DPKG.OPPROC                           := CRZLEVEL
777  789 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                       := TRUE
778  790
779  791 !run_test ()
780  792
781  793 -- OUTPUTS:
782  794 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 26000.0
783  795 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
784  796
785  797
786  798 TESTID: 13
787  799
788  800 Test Name:   VGSELALT_013
789  801 Next altitude Target
790  802 SRD Reference:  10.4.2.2
791  803
792  804
793  805 -- INPUTS:
794  806 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
795  807 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
796  808 VG_HS_DPKG.DATA.FLTPHASE                              := CRUISE
797  809 VG_INPUTS_INT_DPKG.ACALT.ALT                         := 17000.0
798  810 VG_INPUTS_INT_DPKG.CRZALT                            := 26000.0
799  811 VG_INPUTS_INT_DPKG.CRZALTVAL                         := TRUE
800  812 VG_INPUTS_INT_DPKG.FCCSELALT                         := 14000.0
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
801  813 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 16000.0
802  814 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
803  815 VG_ONLY_INT_DPKG.NXTDESTGT                             := 15000.0
804  816 VG_ONLY_INT_DPKG.VGREFALT                             := 26000.0
805  817 VG_OUTPUTS_INT_DPKG.OPPROC                            := CRZLEVEL
806  818 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                        := TRUE
807  819
808  820 !run_test ()
809  821
810  822 -- OUTPUTS:
811  823 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 16000.0
812  824 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
813  825
814  826
815  827 TESTID: 14
816  828
817  829 Test Name:   VGSELALT_014
818  830 Next altitude Target
819  831 SRD Reference:  10.4.2.2
820  832
821  833
822  834 -- INPUTS:
823  835 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := TRUE
824  836 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS            := MASTER
825  837 VG_HS_DPKG.DATA.FLTPHASE                            := CRUISE
826  838 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 21000.0
827  839 VG_INPUTS_INT_DPKG.CRZALT                          := 26000.0
828  840 VG_INPUTS_INT_DPKG.CRZALTVAL                       := TRUE
829  841 VG_INPUTS_INT_DPKG.FCCSELALT                       := 14000.0
830  842 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
831  843 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
832  844 VG_ONLY_INT_DPKG.NXTDESTGT                          := -1000.0
833  845 VG_ONLY_INT_DPKG.STEPCLBAHD                        := TRUE
834  846 VG_ONLY_INT_DPKG.VGREFALT                          := 25000.0
835  847 VG_OUTPUTS_INT_DPKG.OPPROC                         := CRZLEVEL
836  848 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := FALSE
837  849
838  850 !run_test ()
839  851
840  852 -- OUTPUTS:
841  853 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 26000.0
842  854 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
843  855 VG_OUTPUTS_INT_DPKG.VGALTTGTVL = TRUE
844  856
845  857
846  858 TESTID: 15
847  859
848  860 Test Name:   VGSELALT_015
849       ~~Next altitude Target~~
850       ~~SRD Reference:  10.4.2.2~~
     861 Next altitude Target  (10.4.2.2)
     862
     863 During Descent and Approach, maintaining Des/Appr Path, the Altitude Target shall be
     864 the maximum of the Vertical Guidance Reference Altitude (10.1.6) and the Descent
     865 Target Altitude (10.1.6.1.4), when the Vertical Guidance Operational Procedure (10.2)
         »  is Descent Path.
     866
     867 this case to verify when the Vertical Guidance Operational Procedure is Descent Path,
     868 the Vertical Guidance Reference Altitude less than the Descent Target Altitude ,
     869 then he Altitude Target Is equal to the Descent Target Altitude
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
                870 SRD Reference:  VGUIDE_SRD_7006
                871
                872 SRD Reference:  10.4.2.2, VGUIDE_SRD_7006
851             873
852             874
853             875 -- INPUTS:
854             876 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
855             877 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
856             878 VG_HS_DPKG.DATA.FLTPHASE                             := DESCENT
857             879 VG_INPUTS_INT_DPKG.ACALT.ALT                         := 20000.0
858             880 VG_INPUTS_INT_DPKG.FCCSELALT                         := 14000.0
859             881 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
860             882 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
861             883 VG_ONLY_INT_DPKG.DESTGTALT                           := 20000.0
862             884 VG_ONLY_INT_DPKG.NXTDESTGT                          := 25000.0
863             885 VG_ONLY_INT_DPKG.VGREFALT                           := 25000.0
864             886 VG_OUTPUTS_INT_DPKG.OPPROC                          := DESCENTPATH
865             887 VG_OUTPUTS_INT_DPKG.VGALTTGT                        := 19500.0
866             888 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                      := TRUE
867             889
868             890 !run_test ()
869             891
870             892 -- OUTPUTS:
871             893 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 20000.0
872             894 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 25000.0
873             895 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
874             896
875             897
876             898 TESTID: 16
877             899
878             900 Test Name:   VGSELALT_016
879             901 Next altitude Target
880             902 SRD Reference:  10.4.2.2
881             903
882             904
883             905 -- INPUTS:
884             906 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := TRUE
885             907 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
886             908 VG_HS_DPKG.DATA.FLTPHASE                             := DESCENT
887             909 VG_INPUTS_INT_DPKG.ACALT.ALT                         := 16000.0
888             910 VG_INPUTS_INT_DPKG.FCCENGDMODE                      := ALT_HOLD_SPEED
889             911 VG_INPUTS_INT_DPKG.FCCSELALT                         := 14000.0
890             912 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 15566.0
891             913 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
892             914 VG_ONLY_INT_DPKG.DESTGTALT                           := 16000.0
893             915 VG_ONLY_INT_DPKG.NXTDESTGT                          := 14050.0
894             916 VG_ONLY_INT_DPKG.VGREFALT                           := 15566.0
895             917 VG_OUTPUTS_INT_DPKG.OPPROC                          := DESINTLEVEL
896             918 VG_OUTPUTS_INT_DPKG.VGALTTGT                        := 14500.0
897             919 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                      := TRUE
898             920
899             921 !run_test ()
900             922
901             923 -- OUTPUTS:
902             924 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 14500.0
903             925 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 15566.0
904             926 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
905             927 VG_OUTPUTS_INT_DPKG.VGALTTGTVL = FALSE
906             928
907             929
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
908  930 TESTID: 17
909  931
910  932 Test Name:   VGSELALT_017
911  933 Next altitude Target
912  934 SRD Reference:  10.4.2.2
913  935
914  936
915  937 -- INPUTS:
916  938 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := TRUE
917  939 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS            := MASTER
918  940 VG_HS_DPKG.DATA.FLTPHASE                            := DESCENT
919  941 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 21000.0
920  942 VG_INPUTS_INT_DPKG.FCCSELALT                       := 14000.0
921  943 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
922  944 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
923  945 VG_ONLY_INT_DPKG.DESTGTALT                          := 22000.0
924  946 VG_ONLY_INT_DPKG.NXTDESTGT                         := 15500.0
925  947 VG_ONLY_INT_DPKG.VGREFALT                          := 21500.0
926  948 VG_OUTPUTS_INT_DPKG.OPPROC                         := DESPATHOVER
927  949 VG_OUTPUTS_INT_DPKG.VGALTTGT                       := 15555.0
928  950 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
929  951
930  952 !run_test ()
931  953
932  954 -- OUTPUTS:
933  955 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 15555.0
934  956 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 15500.0
935  957 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
936  958
937  959
938  960 TESTID: 18
939  961
940  962 Test Name:   VGSELALT_018
941  963 Next altitude Target
942  964 SRD Reference:  10.4.2.2
943  965
944  966
945  967 -- INPUTS:
946  968 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
947  969 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS            := MASTER
948  970 VG_HS_DPKG.DATA.FLTPHASE                            := DESCENT
949  971 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 21000.0
950  972 VG_INPUTS_INT_DPKG.FCCSELALT                       := 14000.0
951  973 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
952  974 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
953  975 VG_ONLY_INT_DPKG.DESTGTALT                          := 14500.0
954  976 VG_ONLY_INT_DPKG.NXTDESTGT                         := 14050.0
955  977 VG_ONLY_INT_DPKG.VGREFALT                          := 22000.0
956  978 VG_OUTPUTS_INT_DPKG.OPPROC                         := LATEDESCENT
957  979 VG_OUTPUTS_INT_DPKG.VGALTTGT                       := 15555.0
958  980 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
959  981
960  982 !run_test ()
961  983
962  984 -- OUTPUTS:
963  985 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 15555.0
964  986 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 14500.0
965  987 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
966  988
967  989
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
 968  990 TESTID: 19
 969  991
 970  992 Test Name:   VGSELALT_019
 971  993 Next altitude Target
 972  994 SRD Reference:  10.4.2.2
 973  995
 974  996
 975  997 -- INPUTS:
 976  998 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
 977  999 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
 978 1000 VG_HS_DPKG.DATA.FLTPHASE                             := DESCENT
 979 1001 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 21000.0
 980 1002 VG_INPUTS_INT_DPKG.FCCSELALT                        := 14000.0
 981 1003 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
 982 1004 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
 983 1005 VG_ONLY_INT_DPKG.DESTGTALT                          := 15000.0
 984 1006 VG_ONLY_INT_DPKG.NXTDESTGT                          := 14050.0
 985 1007 VG_ONLY_INT_DPKG.VGREFALT                           := 21000.0
 986 1008 VG_OUTPUTS_INT_DPKG.OPPROC                          := EARLYDESCENT
 987 1009 VG_OUTPUTS_INT_DPKG.VGALTTGT                        := 15555.0
 988 1010 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                      := TRUE
 989 1011
 990 1012 !run_test ()
 991 1013
 992 1014 -- OUTPUTS:
 993 1015 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 15555.0
 994 1016 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 15000.0
 995 1017 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
 996 1018
 997 1019
 998 1020 TESTID: 20
 999 1021
1000 1022 Test Name:   VGSELALT_020
1001 1023 Next altitude Target
          »
1002 1024 SRD Reference:  10.4.2.2
1003 1025
1004 1026
1005 1027 -- INPUTS:
1006 1028 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
1007 1029 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1008 1030 VG_HS_DPKG.DATA.FLTPHASE                             := DESCENT
1009 1031 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 21000.0
1010 1032 VG_INPUTS_INT_DPKG.FCCSELALT                        := 14000.0
1011 1033 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 18000.0
1012 1034 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
1013 1035 VG_OUTPUTS_INT_DPKG.ALTTAPETGT                       := 15555.0
1014 1036 VG_ONLY_INT_DPKG.DESTGTALT                          := 17500.0
1015 1037 VG_ONLY_INT_DPKG.NXTDESTGT                          := 14050.0
1016 1038 VG_ONLY_INT_DPKG.VGREFALT                           := 20000.0
1017 1039 VG_OUTPUTS_INT_DPKG.OPPROC                          := HOLDTOMANUAL
1018 1040 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                      := TRUE
1019 1041
1020 1042 !run_test ()
1021 1043
1022 1044 -- OUTPUTS:
1023 1045 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 15555.0
1024 1046 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 18000.0
1025 1047 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
1026 1048
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
1027 1049
1028 1050 TESTID: 21
1029 1051
1030 1052 Test Name:   VGSELALT_021
1031 1053 Next altitude Target
1032 1054 SRD Reference:  10.4.2.2
1033 1055
1034 1056
1035 1057 -- INPUTS:
1036 1058 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
1037 1059 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1038 1060 VG_HS_DPKG.DATA.FLTPHASE                             := DESCENT
1039 1061 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 19000.0
1040 1062 VG_INPUTS_INT_DPKG.FCCSELALT                        := 14000.0
1041 1063 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 19000.0
1042 1064 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
1043 1065 VG_ONLY_INT_DPKG.DESTGTALT                          := 17000.0
1044 1066 VG_ONLY_INT_DPKG.NXTDESTGT                         := 15500.0
1045 1067 VG_ONLY_INT_DPKG.VGREFALT                          := 16000.0
1046 1068 VG_OUTPUTS_INT_DPKG.OPPROC                         := AIRMASSDSCNT
1047 1069 VG_OUTPUTS_INT_DPKG.VGALTTGT                       := 15555.0
1048 1070 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
1049 1071
1050 1072 !run_test ()
1051 1073
1052 1074 -- OUTPUTS:
1053 1075 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 15555.0
1054 1076 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 15500.0
1055 1077 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
1056 1078
1057 1079
1058 1080 TESTID: 22
1059 1081
1060 1082 Test Name:   VGSELALT_022
1061 1083 SRD Reference:  10.2.13.3, 10.4.2, 10.4.2.1
1062 1084
1063 1085
1064 1086 -- INPUTS:
1065 1087 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
1066 1088 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 18000.0
1067 1089 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 18000.0
1068 1090 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
1069 1091 VG_ONLY_INT_DPKG.DESTGTALT                          := 17000.0
1070 1092 VG_ONLY_INT_DPKG.NXTDESTGT                         := 15550.0
1071 1093 VG_ONLY_INT_DPKG.VGREFALT                          := 16000.0
1072 1094 VG_OUTPUTS_INT_DPKG.OPPROC                         := EODRIFTDOWN
1073 1095 VG_OUTPUTS_INT_DPKG.VGALTTGT                       := 14444.0
1074 1096 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
1075 1097
1076 1098 !run_test ()
1077 1099
1078 1100 -- OUTPUTS:
1079 1101 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 14444.0
1080 1102 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 15550.0
1081 1103 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
1082 1104
1083 1105
1084 1106 TESTID: 23
1085 1107 Test Name:   VGSELALT_023
1086 1108 Next altitude Target
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
1087  1109 SRD Reference:  10.4.2.2
1088  1110
1089  1111
1090  1112 -- INPUTS:
1091  1113 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
1092  1114 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1093  1115 VG_HS_DPKG.DATA.FLTPHASE                             := CRUISE
1094  1116 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 21000.0
1095  1117 VG_INPUTS_INT_DPKG.CRZALT                           := 13000.0
1096  1118 VG_INPUTS_INT_DPKG.FCCSELALT                        := 14000.0
1097  1119 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
1098  1120 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
1099  1121 VG_ONLY_INT_DPKG.NXTDESTGT                          := -1000.0
1100  1122 VG_ONLY_INT_DPKG.STEPCLBAHD                        := FALSE
1101  1123 VG_ONLY_INT_DPKG.VGREFALT                          := 25000.0
1102  1124 VG_OUTPUTS_INT_DPKG.OPPROC                         := CRZLEVEL
1103  1125 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
1104  1126
1105  1127 !run_test ()
1106  1128
1107  1129 -- OUTPUTS:
1108  1130 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 13000.0
1109  1131 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
1110  1132
1111  1133
1112       ~~TESTID: 23~~
      1134 TESTID: 24
1113  1135
1114  1136 Test Name:   VGSELALT_023
1115  1137 Next altitude Target
1116  1138 SRD Reference:  10.4.2.2
1117  1139
1118  1140
1119  1141 -- INPUTS:
1120  1142 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
1121  1143 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1122  1144 VG_HS_DPKG.DATA.FLTPHASE                             := CRUISE
1123  1145 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 17000.0
1124  1146 VG_INPUTS_INT_DPKG.CRZALT                           := 13000.0
1125  1147 VG_INPUTS_INT_DPKG.FCCSELALT                        := 12000.0
1126  1148 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 17000.0
1127  1149 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
1128  1150 VG_ONLY_INT_DPKG.DESTGTALT                         := 16000.0
1129  1151 VG_ONLY_INT_DPKG.NXTDESTGT                          := -1001.0
1130  1152 VG_ONLY_INT_DPKG.STEPCLBAHD                        := FALSE
1131  1153 VG_ONLY_INT_DPKG.VGREFALT                          := 25000.0
1132  1154 VG_OUTPUTS_INT_DPKG.OPPROC                         := CRZLEVEL
1133  1155 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
1134  1156
1135  1157 !run_test ()
1136  1158
1137  1159 -- OUTPUTS:
1138  1160 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 17000.0
1139  1161 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
1140  1162
1141  1163
1142       ~~TESTID: 24~~
      1164 TESTID: 25
1143  1165
1144  1166 Test Name:   VGSELALT_024
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
1145  1167 Next altitude Target
1146  1168 SRD Reference:  10.4.2.2
1147  1169
1148  1170
1149  1171 -- INPUTS:
1150  1172 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
1151  1173 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1152  1174 VG_HS_DPKG.DATA.FLTPHASE                             := CLIMB
1153  1175 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 20000.0
1154  1176 VG_INPUTS_INT_DPKG.CRZALT                           := 13000.0
1155  1177 VG_INPUTS_INT_DPKG.CRZALTVAL                        := FALSE
1156  1178 VG_INPUTS_INT_DPKG.FCCSELALT                       := 14000.0
1157  1179 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 20000.0
1158  1180 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
1159  1181 VG_ONLY_INT_DPKG.NXTCLBTGT                         := 42000.0
1160  1182 VG_ONLY_INT_DPKG.VGREFALT                         := 21000.0
1161  1183 VG_OUTPUTS_INT_DPKG.OPPROC                         := CLBINTLEVEL
1162  1184 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
1163  1185 VG_INPUTS_INT_DPKG.CRZALTVAL                       := TRUE
1164  1186
1165  1187 !run_test ()
1166  1188
1167  1189 -- OUTPUTS:
1168  1190 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 42000.0
1169  1191 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
1170  1192
1171  1193
1172       ~~TESTID: 25~~
     1194 TESTID: 26
1173  1195
1174  1196 Test Name:   VGSELALT_025
1175  1197 Next altitude Target
1176  1198 SRD Reference:  10.4.2.2
1177  1199
1178  1200
1179  1201 -- INPUTS:
1180  1202 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
1181  1203 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1182  1204 VG_HS_DPKG.DATA.FLTPHASE                             := CRUISE
1183  1205 VG_INPUTS_INT_DPKG.ACALT.ALT                        := 21000.0
1184  1206 VG_INPUTS_INT_DPKG.CRZALT                           := 13000.0
1185  1207 VG_INPUTS_INT_DPKG.CRZALTVAL                        := TRUE
1186  1208 VG_INPUTS_INT_DPKG.FCCSELALT                       := 14000.0
1187  1209 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
1188  1210 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
1189  1211 VG_ONLY_INT_DPKG.DESTGTALT                         := -1000.0
1190  1212 VG_ONLY_INT_DPKG.NXTCLBTGT                         := -1000.0
1191  1213 VG_ONLY_INT_DPKG.NXTDESTGT                         := -1000.0
1192  1214 VG_ONLY_INT_DPKG.STEPCLBAHD                        := FALSE
1193  1215 VG_ONLY_INT_DPKG.VGREFALT                         := 25000.0
1194  1216 VG_OUTPUTS_INT_DPKG.OPPROC                         := HOLDTOMANUAL
1195  1217 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                     := TRUE
1196  1218 Vg_Inputs_Int_Dpkg.Minimum_Certified_Altitude      := -1000.0
1197  1219
1198  1220 !run_test ()
1199  1221
1200  1222 -- OUTPUTS:
1201  1223 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = -1000.0
1202  1224 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = FALSE
1203  1225
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
1204  1226
1205        ~~TESTID: 26~~
      1227  TESTID: 27
1206  1228
1207  1229  Test Name:   VGSELALT_026
1208  1230  Next altitude Target
1209  1231  SRD Reference:  10.4.2.2
1210  1232
1211  1233
1212  1234  -- INPUTS:
1213  1235  Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
1214  1236  FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1215  1237  VG_HS_DPKG.DATA.FLTPHASE                              := CRUISE
1216  1238  VG_INPUTS_INT_DPKG.ACALT.ALT                          := 21000.0
1217  1239  VG_INPUTS_INT_DPKG.CRZALT                             := 14500.0
1218  1240  VG_INPUTS_INT_DPKG.CRZALTVAL                          := TRUE
1219  1241  VG_INPUTS_INT_DPKG.FCCSELALT                          := 14000.0
1220  1242  VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
1221  1243  VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
1222  1244  VG_ONLY_INT_DPKG.DESTGTALT                            := -1000.0
1223  1245  VG_ONLY_INT_DPKG.NXTCLBTGT                            := -1000.0
1224  1246  VG_ONLY_INT_DPKG.NXTDESTGT                            := -1000.0
1225  1247  VG_ONLY_INT_DPKG.STEPCLBAHD                           := FALSE
1226  1248  VG_ONLY_INT_DPKG.VGREFALT                             := 25000.0
1227  1249  VG_OUTPUTS_INT_DPKG.OPPROC                            := CRZLEVEL
1228  1250  VG_OUTPUTS_INT_DPKG.VGALTTGTVL                        := TRUE
1229  1251
1230  1252  !run_test ()
1231  1253
1232  1254  -- OUTPUTS:
1233  1255  VG_OUTPUTS_INT_DPKG.NXTALTTGT  = -1000.0
1234  1256  VG_OUTPUTS_INT_DPKG.NXTALTTGTV = FALSE
1235  1257
1236  1258
1237        ~~TESTID: 27~~
      1259  TESTID: 28
1238  1260
1239  1261  Test Name:   VGSELALT_027
1240  1262  Next altitude Target
1241  1263  SRD Reference:  10.4.2.2
1242  1264
1243  1265
1244  1266  -- INPUTS:
1245  1267  Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := TRUE
1246  1268  FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1247  1269  VG_HS_DPKG.DATA.FLTPHASE                              := DESCENT
1248  1270  VG_INPUTS_INT_DPKG.ACALT.ALT                          := 16000.0
1249  1271  VG_INPUTS_INT_DPKG.FCCENGDMODE                        := ALT_HOLD_MAX_THRUST
1250  1272  VG_INPUTS_INT_DPKG.FCCSELALT                          := 14000.0
1251  1273  VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 15566.0
1252  1274  VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
1253  1275  VG_ONLY_INT_DPKG.DESTGTALT                            := 16000.0
1254  1276  VG_ONLY_INT_DPKG.NXTDESTGT                            := 14050.0
1255  1277  VG_ONLY_INT_DPKG.VGREFALT                             := 15566.0
1256  1278  VG_OUTPUTS_INT_DPKG.OPPROC                            := DESINTLEVEL
1257  1279  VG_OUTPUTS_INT_DPKG.VGALTTGT                          := 14500.0
1258  1280  VG_OUTPUTS_INT_DPKG.VGALTTGTVL                        := TRUE
1259  1281
1260  1282  !run_test ()
1261  1283
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
1262  1284  -- OUTPUTS:
1263  1285  VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 14500.0
1264  1286  VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 15566.0
1265  1287  VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
1266  1288  VG_OUTPUTS_INT_DPKG.VGALTTGTVL = FALSE
1267  1289
1268  1290
1269        ~~TESTID: 28~~
      1291  TESTID: 29
1270  1292
1271  1293  Test Name:   VGSELALT_028
1272  1294  The Vertical Guidance Altitude Target (AA, CIL, CL, DP, DIL, ED, LD, DPO, HM, AD, EO
            » T/O, EO T/O Lvl Acc, EODD)
1273  1295  is the Vertical Guidance Reference Altitude (FCC package not called)
1274  1296  SRD REFERENCE 10.2.1.3, 10.2.2.3, 10.2.3.3, 10.2.4.3, 10.2.5.3, 10.2.6.3,
1275  1297  SRD REFERENCE 10.2.7.3, 10.2.8.3, 10.2.9.3, 10.2.10.3, 10.2.11.3, 10.2.12.3
1276  1298  (VGUIDE_SRD_8005, MD11_VG_TEST_1104) & (VGUIDE_SRD_5206, MD11_VG_TEST_1202) & (VGUIDE
            » _SRD_5304, MD11_VG_TEST_1303) &
1277  1299  (VGUIDE_SRD_5618, MD11_VG_TEST_1403) & (VGUIDE_SRD_5655, MD11_VG_TEST_1503) & (VGUIDE
            » _SRD_8286, MD11_VG_TEST_3822) &
1278  1300  (VGUIDE_SRD_8235, MD11_VG_TEST_3823) & (VGUIDE_SRD_8201, MD11_VG_TEST_3824) & (VGUIDE
            » _SRD_8152, MD11_VG_TEST_3825) &
1279  1301  (VGUIDE_SRD_8118, MD11_VG_TEST_3826) & (VGUIDE_SRD_2840, MD11_VG_TEST_3827) & (VGUIDE
            » _SRD_5555, MD11_VG_TEST_3828) &
1280  1302  (VGUIDE_SRD_2894, MD11_VG_TEST_3829)
1281  1303
1282  1304
1283  1305  -- INPUTS:
1284  1306  Test_VG_SELECT_ALT_TARGET.test_for_FCC_call   := FALSE
1285  1307  VG_ONLY_INT_DPKG.VGREFALT                     := 15566.0
1286  1308  VG_OUTPUTS_INT_DPKG.VGALTTGT                  := 15000.0
1287  1309
1288  1310  !run_test ()
1289  1311
1290  1312  -- OUTPUTS:
1291  1313  VG_ONLY_INT_DPKG.VGREFALT                     = 15566.0
1292  1314  VG_OUTPUTS_INT_DPKG.VGALTTGT                  = 15000.0
1293  1315
1294  1316
1295        ~~TESTID: 29~~
      1317  TESTID: 30
1296  1318
1297  1319  Test Name:   VGSELALT_029
1298  1320  The Vertical Guidance Altitude Target (AA, CIL, CL, EO T/O, EO T/O, Lvl Acc) is the V
            » ertical Guidance Reference Altitude
1299  1321  SRD REFERENCE 10.2.1.3, 10.2.2.3, 10.2.3.3, 10.2.11.3, 10.2.12.3 (FCC package called)
1300  1322  (VGUIDE_SRD_8005, MD11_VG_TEST_1104) & (VGUIDE_SRD_5206, MD11_VG_TEST_1202) & (VGUIDE
            » _SRD_5304, MD11_VG_TEST_1303) &
1301  1323  (VGUIDE_SRD_5618, MD11_VG_TEST_1403) & (VGUIDE_SRD_5655, MD11_VG_TEST_1503) & (VGUIDE
            » _SRD_8286, MD11_VG_TEST_3822) &
1302  1324  (VGUIDE_SRD_8235, MD11_VG_TEST_3823) & (VGUIDE_SRD_8201, MD11_VG_TEST_3824) & (VGUIDE
            » _SRD_8152, MD11_VG_TEST_3825) &
1303  1325  (VGUIDE_SRD_8118, MD11_VG_TEST_3826) & (VGUIDE_SRD_2840, MD11_VG_TEST_3827) & (VGUIDE
            » _SRD_5555, MD11_VG_TEST_3828) &
1304  1326  (VGUIDE_SRD_2894, MD11_VG_TEST_3829)
1305  1327
1306  1328
1307  1329  -- INPUTS:
1308  1330  Test_VG_SELECT_ALT_TARGET.test_for_FCC_call   := TRUE
1309  1331  VG_ONLY_INT_DPKG.VGREFALT                     := 15566.0
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
1310  1332 VG_OUTPUTS_INT_DPKG.VGALTTGT                    := 15000.0
1311  1333
1312  1334 !run_test ()
1313  1335
1314  1336 -- OUTPUTS:
1315  1337 VG_ONLY_INT_DPKG.VGREFALT                       = 15566.0
1316  1338 VG_OUTPUTS_INT_DPKG.VGALTTGT                    = 15566.0
1317  1339
1318       ~~TESTID: 30~~
      1340 TESTID: 31
1319  1341
1320  1342 Test Name:   VGSELALT_030
1321  1343 Next altitude Target
1322  1344 SRD Reference:  10.4.2.2
1323  1345
1324  1346
1325  1347 -- INPUTS:
1326  1348 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := TRUE
1327  1349 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS            := MASTER
1328  1350 VG_HS_DPKG.DATA.FLTPHASE                            := CRUISE
1329  1351 VG_INPUTS_INT_DPKG.ACALT.ALT                       := 21000.0
1330  1352 VG_INPUTS_INT_DPKG.CRZALT                          := 26000.0
1331  1353 VG_INPUTS_INT_DPKG.CRZALTVAL                       := TRUE
1332  1354 VG_INPUTS_INT_DPKG.FCCSELALT                      := 14000.0
1333  1355 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
1334  1356 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
1335  1357 VG_ONLY_INT_DPKG.NXTDESTGT                         := -1000.0
1336  1358 VG_ONLY_INT_DPKG.STEPCLBAHD                       := TRUE
1337  1359 VG_ONLY_INT_DPKG.VGREFALT                         := 25000.0
1338  1360 VG_OUTPUTS_INT_DPKG.OPPROC                        := AIRMASSASCNT
1339  1361 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                    := FALSE
1340  1362
1341  1363 !run_test ()
1342  1364
1343  1365 -- OUTPUTS:
1344  1366 VG_OUTPUTS_INT_DPKG.NXTALTTGT  = 26000.0
1345  1367 VG_OUTPUTS_INT_DPKG.NXTALTTGTV = TRUE
1346  1368 VG_OUTPUTS_INT_DPKG.VGALTTGTVL = TRUE
1347  1369
1348  1370
      1371 TESTID: 32
      1372
      1373 During Descent and Approach, maintaining Des/Appr Path, the Altitude Target shall be
      1374 the maximum of the Vertical Guidance Reference Altitude (10.1.6) and the Descent
      1375 Target Altitude (10.1.6.1.4), when the Vertical Guidance Operational Procedure (10.2)
           » is Descent Path.
      1376
      1377 this case to verify when the Vertical Guidance Operational Procedure is Descent Path,
      1378 the Vertical Guidance Reference Altitude greater than the Descent Target Altitude ,
      1379 then he Altitude Target Is equal to the Vertical Guidance Reference Altitude
           »
      1380 SRD Reference:  VGUIDE_SRD_7006
      1381
      1382
      1383 -- INPUTS:
      1384 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := FALSE
      1385 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS            := MASTER
      1386 VG_HS_DPKG.DATA.FLTPHASE                            := DESCENT
      1387 VG_INPUTS_INT_DPKG.ACALT.ALT                       := 20000.0
      1388 VG_INPUTS_INT_DPKG.FCCSELALT                      := 14000.0
```

File: CTP_MD11_VG_SEL_ALT_TGT.TDF (continued)

```
1389 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
1390 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := FALSE
1391 VG_ONLY_INT_DPKG.DESTGTALT                            := 20000.0
1392 VG_ONLY_INT_DPKG.NXTDESTGT                            := 25000.0
1393 VG_ONLY_INT_DPKG.VGREFALT                             := 25000.0
1394 VG_OUTPUTS_INT_DPKG.OPPROC                            := DESCENTPATH
1395 VG_OUTPUTS_INT_DPKG.VGALTTGT                          := 20500.0
1396 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                        := TRUE
1397
1398 !run_test ()
1399
1400 -- OUTPUTS:
1401 VG_OUTPUTS_INT_DPKG.ALTTAPETGT = 20500.0
1402
1403
1404 TESTID: 33
1405
1406 During Descent and Approach, maintaining Des/Appr Path, the Altitude Target shall be
1407 the maximum of the Vertical Guidance Reference Altitude (10.1.6) and the Descent
1408 Target Altitude (10.1.6.1.4), when the Vertical Guidance Operational Procedure (10.2)
     »  is Descent Path.
1409
1410 this case to verify when the Vertical Guidance Operational Procedure is not Descent P
     » ath,
1411 SRD Reference:  VGUIDE_SRD_xxx
1412
1413
1414 -- INPUTS:
1415 Test_VG_SELECT_ALT_TARGET.test_for_FCC_call           := TRUE
1416 FMCS_PARTITION_DATA_PKG.OPS_MASTER_STATUS             := MASTER
1417 VG_HS_DPKG.DATA.FLTPHASE                              := CRUISE
1418 VG_INPUTS_INT_DPKG.ACALT.ALT                          := 21000.0
1419 VG_INPUTS_INT_DPKG.CRZALT                             := 26000.0
1420 VG_INPUTS_INT_DPKG.CRZALTVAL                         := TRUE
1421 VG_INPUTS_INT_DPKG.FCCSELALT                         := 14000.0
1422 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).ALT  := 21000.0
1423 VG_INPUTS_INT_DPKG.MDA(MDXX_LGB_TPKG.ACTPRIMARY).VAL  := TRUE
1424 VG_ONLY_INT_DPKG.NXTDESTGT                            := -1000.0
1425 VG_ONLY_INT_DPKG.STEPCLBAHD                          := TRUE
1426 VG_ONLY_INT_DPKG.VGREFALT                             := 25000.0
1427 VG_OUTPUTS_INT_DPKG.OPPROC                            := Crzlevel
1428 VG_OUTPUTS_INT_DPKG.VGALTTGTVL                        := FALSE
1429 Vg_Inputs_Int_Dpkg.Fccengdmode                            := Alt_Capt_Speed
1430 VG_OUTPUTS_INT_DPKG.VGALTTGT                          := 24900.0
1431 VG_ONLY_INT_DPKG.DESTGTALT                            := 25000.0
1432
1433 !run_test ()
1434
1435 -- OUTPUTS:
1436 VG_OUTPUTS_INT_DPKG.ALTTAPETGT  = 24900.0
```

Mode: All Lines
Left base folder: D:\MD11\17011\CTP_MD11_VG_SEL_ALT_TGT\old
Right base folder: D:\MD11\17011\CTP_MD11_VG_SEL_ALT_TGT

File: CTP_MD11_VG_SEL_ALT_TGT.TRT

```
1  1  !*****************************************************************************
2  2  !Trace Filename: CTP_MD11_VG_SEL_ALT_TGT.TRT
3  3  !     UPDATED    SCR       UPDATED
4  4  !     DATE       NUMBER    BY
5  5  !    .==========.=========.================================================
6  6  !     01/11/2001 N/A       Auto-Created from VMS trace data
   7  !     05/30/2013  17011.01  Dun Qing   Integration of the SRD Anchor
7  8  !
8  9  !*****************************************************************************
9  10 !Aircraft     Document  Anchor                    Traces to Anchor
10 11 !------------ --------- ------------------------- ------------------------
11 12 MD11          SRD       MD11_VG_TEST_2059         VGUIDE_SRD_7000
12    MD11          SRD       MD11_VG_TEST_2057         VGUIDE_SRD_7002
13    MD11          SRD       MD11_VG_TEST_2018         VGUIDE_SRD_7003
14    MD11          SRD       MD11_VG_TEST_3830         VGUIDE_SRD_7004
15    MD11          SRD       MD11_VG_TEST_3831         VGUIDE_SRD_7006
16    MD11          SRD       MD11_VG_TEST_2019         VGUIDE_SRD_7007
17    MD11          SRD       MD11_VG_TEST_3832         VGUIDE_SRD_7008
18    MD11          SRD       MD11_VG_TEST_3833         VGUIDE_SRD_7009
19    MD11          SRD       MD11_VG_TEST_2020         VGUIDE_SRD_7010
20    MD11          SRD       MD11_VG_TEST_3834         VGUIDE_SRD_7011
21    MD11          SRD       MD11_VG_TEST_3835         VGUIDE_SRD_7012
22    MD11          SRD       MD11_VG_TEST_3836         VGUIDE_SRD_7013
23    MD11          SRD       MD11_VG_TEST_3837         VGUIDE_SRD_7015
24    MD11          SRD       MD11_VG_TEST_3838         VGUIDE_SRD_7017
25    MD11          SRD       MD11_VG_TEST_1178         VGUIDE_SRD_2902
26    MD11          SRD       MD11_VG_TEST_1104         VGUIDE_SRD_8005
27    MD11          SRD       MD11_VG_TEST_1278         VGUIDE_SRD_5205
28    MD11          SRD       MD11_VG_TEST_1202         VGUIDE_SRD_5206
29    MD11          SRD       MD11_VG_TEST_1357         VGUIDE_SRD_3041
30    MD11          SRD       MD11_VG_TEST_1303         VGUIDE_SRD_5304
31    MD11          SRD       MD11_VG_TEST_1417         VGUIDE_SRD_3026
32    MD11          SRD       MD11_VG_TEST_1403         VGUIDE_SRD_5618
33    MD11          SRD       MD11_VG_TEST_1513         VGUIDE_SRD_2837
34    MD11          SRD       MD11_VG_TEST_1503         VGUIDE_SRD_5655
35    MD11          SRD       MD11_VG_TEST_3282         VGUIDE_SRD_3072
36    MD11          SRD       MD11_VG_TEST_3283         VGUIDE_SRD_3103
37    MD11          SRD       MD11_VG_TEST_3284         VGUIDE_SRD_3221
38    MD11          SRD       MD11_VG_TEST_3285         VGUIDE_SRD_3150
39    MD11          SRD       MD11_VG_TEST_3286         VGUIDE_SRD_3190
40    MD11          SRD       MD11_VG_TEST_3287         VGUIDE_SRD_2810
41    MD11          SRD       MD11_VG_TEST_3288         VGUIDE_SRD_2848
42    MD11          SRD       MD11_VG_TEST_3289         VGUIDE_SRD_2891
43    MD11          SRD       MD11_VG_TEST_3899         VGUIDE_SRD_8286
44    MD11          SRD       MD11_VG_TEST_3823         VGUIDE_SRD_8235
45    MD11          SRD       MD11_VG_TEST_3824         VGUIDE_SRD_8201
46    MD11          SRD       MD11_VG_TEST_3825         VGUIDE_SRD_8152
47    MD11          SRD       MD11_VG_TEST_3826         VGUIDE_SRD_8118
48    MD11          SRD       MD11_VG_TEST_3827         VGUIDE_SRD_2840
49    MD11          SRD       MD11_VG_TEST_3828         VGUIDE_SRD_5555
50    MD11          SRD       MD11_VG_TEST_3829         VGUIDE_SRD_2894
   13 MD11          SRD       MD11_VG_TEST_2059         VGUIDE_SRD_7002
   14 MD11          SRD       MD11_VG_TEST_2059         VGUIDE_SRD_7003
   15 MD11          SRD       MD11_VG_TEST_2059         VGUIDE_SRD_7004
   16 MD11          SRD       MD11_VG_TEST_2059         VGUIDE_SRD_7006
   17 MD11          SRD       MD11_VG_TEST_2059         VGUIDE_SRD_7007
```

File: CTP_MD11_VG_SEL_ALT_TGT.TRT (continued)

	18	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_7008
	19	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_7009
	20	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_7010
	21	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_7011
	22	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_7012
	23	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_7013
	24	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_7015
	25	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_7017
	26	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_2902
	27	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_8005
	28	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_5205
	29	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_5206
	30	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_3041
	31	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_5304
	32	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_3026
	33	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_5618
	34	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_2837
	35	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_5655
	36	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_3072
	37	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_3103
	38	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_3221
	39	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_3150
	40	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_3190
	41	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_2810
	42	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_2848
	43	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_2891
	44	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_8286
	45	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_8235
	46	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_8201
	47	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_8152
	48	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_8118
	49	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_2840
	50	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_5555
	51	MD11	SRD	MD11_VG_TEST_2059	VGUIDE_SRD_2894