DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

	A28NM
	Revision 47
Airbus	1220 G :
A318 Series	A320 Series
A318 Model -111	A320 Model -111 *
A318 Model -112	A320 Model -211
A318 Model -121	A320 Model -212
A318 Model -122	A320 Model -214
	A320 Model -231
A319 Series	A320 Model -232
A319 Model -111	A320 Model -233
A319 Model -112	A320 Model -251N
A319 Model -113	A320 Model -271N
A319 Model -114	A320 Model -216
A319 Model -115	A320 Model -252N
A319 Model -131	A320 Model -272N
	A320 Model -253N
	A320 Model -273N
A319 Model -132	
A319 Model -133	A321 Series
A319 Model -151N	A321 Model -111
A319 Model -153N	A321 Model -112
A319 Model -171N	A321 Model -131
	A321 Model -211
	A321 Model -231
	A321 Model -212
	A321 Model -213
	A321 Model -232
	A321 Model -271N
	A321 Model -251N
	A321 Model -253N
	A321 Model -272N
	A321 Model -252N
	A321 Model -251NX
	A321 Model -252NX
	A321 Model -253NX
	A321 Model -271NX
	A321 Model -272NX
	February 7, 2022

TYPE CERTIFICATION DATA SHEET A28NM

This Data Sheet which is part of Type Certificate No. A28NM prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Airbus SAS

2, Rond-Point Emile Dewoitine

31700 Blagnac, France

Type Certificate Holder Record Name change from Airbus Industrie to Airbus January 2002

^{*} NOTE: Model A320-111 airplanes have been removed from this type certificate data sheet since there are no more A320-111 airplanes in service and none in storage. Airbus no longer supports Model A320-111 airplanes.

I. Type A318-100 Series Transport Category Airplanes

Model A318-111, Approved June 4, 2003;

Model A318-112, Approved June 4, 2003;

Model A318-121, Approved May 25,2007; Model A318-122, Approved May 25, 2007;

Engines:

Model A318-111, Two CFMI Model CFM56-5B8/P or CFM56-5B8/3 jet engines

Model A318-112, Two CFMI Model CFM56-5B9/P or CFM56-5B9/3 jet engines

Model A318-121, Two Pratt & Whitney Model PW6122A

Model A318-122, Two Pratt & Whitney Model PW6124A

See Note 4 for description of "/3" engine models

See Installation Manual - Document CFM 2129 or PWA7707

TYPE	SPECIFICATION (NAME)					
	FRAN	CE	US	SA	UK	
Kerosene	DCSEA 134-D	(F-34)	ASTM D 1655	(JET A) (JET A1)	DEF STAN 91/91	(AVTUR) (JET A1)
			MIL-DTL- 83133-H	(JP 8)	DEF STAN 91/87 iss 7	(AVTUR/FSH) (JET A1) (AIA)
Wide cut			ASTM D 6615	(JET B)	DEF STAN 91/88	(AVTAG/FSH)
			MIL-DTL-5624	(JP 4)		
High flash point	DCSEA 144-C	(F-44)	MIL-DTL- 5624-V	(JP 5)	DEF STAN 91/86 iss 7	(AVCAT)

Additives: See CFMI "Specific Operating Instructions," CMF TPOI-13 or P&W Service Bulletin 2016. The above mentioned fuels and additives are also suitable for the APU.

Engine Limits:

<u> </u>	CFMI CFM56-5B8/P	CFMI CFM56-5B9/P	PW6122A	PW6124A
	or -5B8/3	or -5B9/3		
Engine	FAA Data Sheets	FAA Data Sheets	FAA Data Sheet	FAA Data Sheet
Limitation	E37NE E38NE	E37NE E38NE	E00064EN	E00064EN
Static Thrust at Sea				
Level				
- Take-off (5 min)**	9 608 daN	10 364 daN	9 830 daN	10 587 daN
(Flat rated 30°C)	(21,600 lb)	(23,300 lb)	(22,100 lbs)	(23,800 lbs)
Maximum Continuous	8478 daN	9 008 daN	9 030 daN	9 297 daN
(Flat rated 25°C)	(19,060 1b)	(20,250 lb)	(20,300 lbs)	(20,900 lbs)
Maximum Engine				
Speed				
- N1 rpm (%)	5,200 (104)	5,200 (104)	6,350 (99.1)	6,350 (99.1)
- N2 rpm (%)	15,183 (105)	15,183 (105)	18,850 (100)	18,850 (100)
Max Gas Temperature				
(°C)				
- Take-off (5 min)**	940	950	760	760
- Max Continuous	905	915	727	727
- Starting *	725	725	760	760

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	CFMI CFM56-5B8/P	CFMI CFM56-5B9/P	PW6122A	PW6124A
	or -5B8/3	or -5B9/3		
Engine	FAA Data Sheets	FAA Data Sheets	FAA Data Sheet	FAA Data Sheet
Limitation	E37NE E38NE	E37NE E38NE	E00064EN	E00064EN
Max Oil Temperature				
(supply pump inlet;				
°C)				
- Stabilized	140	140	163	163
	(Take Off)	(Take Off)	(Max Continuous)	(Max Continuous)
- Transient	150	150	177	177
	(15 min max)	(15 min max)	(20 min max)	(20 min max)
Min. Press. (PSI)	13	13	25	25
Approved Oils	See SB	See SB	See PW SB 238	See PW SB 238
	CFMI 79-001-0X	CFMI 79-001-0X		

^{* 4} consecutive cycles of 2 minutes each.

<u>Airspeed Limits (Indicated Airspeed - IAS - Unless Otherwise Stated:</u>

Maximum Operating Mach
 Maximum Operating Speed
 VMO: 350 kt

- Maneuvering Speed VA:

- See Limitations Section of Aircraft Flight Manual

- Extended Flaps/Slats Speed - VFE

Airspeed limits Continued:

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Configuration	Slats/Flaps	VFE (kt)	
1	18/0	230	Intermediate Approach
	*18/10	215	Take-off
2	22/15	200	Take-off and Approach
3	22/20	185	Take-off, Approach, and Landing
Full	27/40	177	Landing

^{*} Auto flap retraction at 210 kt in Take-off configuration.

Landing Gear:

- VLE - Extended: 280 kt/Mach 0.67

- VLO - Extension: 250 kt - Retraction: 220 kt

Tire Limit Speed (Ground Speed) = 195.5 kt (225 mph)

Maximum Weights:

Maximum Weights.										
VARIANT	(000	0	001	0	002	(003	0	004
	BA	ASIC	MOD	31672	MOD	31673	MOD	31674	MOD	31675
	(KG)	(LBS)								
Max. Take-off Weight	59 000	130 071	61 500	135 583	63 000	138 890	64 500	142 197	66 000	145 504
Max. Landing Weight	56 000	123 458	56 000	123 458	57 500	126 765	57 500	126 765	57 500	126 765
Max. Zero Fuel Weight	53 000	116 844	53 000	116 844	54 500	120 151	54 500	120 151	54 500	120 151

VARIANT	005	006	007	008
	MOD 31676	MOD 33235	MOD 33126	MOD 33128
	(KG) (LBS	(KG) (LBS	(KG) (LBS	(KG) (LBS
Max. Take-off Weight	68 000 149 913	56 000 123 458	61 000 134 481	64 000 141 094
Max. Landing Weight	57 500 126 765	56 000 123 458	56 000 123 458	56 000 123 458
Max. Zero Fuel Weight	54 500 120 151	53 000 116 844	53 000 116 844	53 000 116 844

Minimum Weight:

ivinimani vv cight.	
VARIANT	All (KG) (LBS)
Minimum Weight	34 500 76 059

^{** 10} minutes at take-off thrust allowed in case of engine failure (at take off and during go around).

Minimum Crew:

2 Pilots

Maximum Passengers:

136

See note 6

Maximum Baggage:

manimum Buggage.	
CARGO COMPARTMENT MAXIMUM LOAD	
	(KG) (LBS)
Forward	1,614 3,558
Aft	2,131 4,698
Rear (Bulk)	1,372 3,025

For the positions and the loading conditions authorized in each position (references of containers, pallets, associated weights), see Weight and Balance Manual, Ref. 00P080A0001/C1S Chapter 1.10.

Fuel Capacity (0.8 kg/liter)

A318-100

		3-Tank Airplane		
Tank	Usab	le Fuel	Unusal	ble Fuel
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
Wing	15,609	4,124	58.9	15.6
	(12,487)	(27,531)	(47.1)	(103.9)
Center	8,250	2,179	23.2	6.5
	(6,600)	(14,551)	(18.6)	(41.0)
TOTAL	23,859	6,303	82.1	20.8
	(19,087)	(42,082)	(65.7)	(144.9)

A318-100 with modification 160001 (Structural Provisions for Sharklet - see note 9)

		3-Tank Airplane		
Tank	Usab	le Fuel	Unusal	ble Fuel
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
Wing	15,568	4,113	58.9	15.6
-	(12,454)	(27,458)	(47.1)	(103.9)
Center	8,248	2,178	23.2	6.5
	(6,598)	(14,546)	(18.6)	(41.0)
TOTAL	23,816	6,291	82.1	20.8
	(19,052)	(42,007)	(65.7)	(144.9)

Oil Capacity

CFMI CFM56-5B - Engine Oil Capacity, 10 quarts/engine (9.46 liters).

Maximum Operating Altitude:

- 39,800 feet (12,200 m) clean
- 20,000 feet (6,500 m) Slats/Flaps extended.

Equipment:

The basic equipment as prescribed in the airworthiness regulations (see certification basis) must be installed in the aircraft for certification.

Refer to note 1 for list of A318 airplane model FAA Type Definitions.

Serial Numbers Eligible:

Until September 26, 2004, A318 aircraft, all series, all models, have been produced in Hamburg (Germany) under approval LBA.G.0009 issued by LBA to Airbus.

From September 27, 2004 until July 20, 2008, A318 aircraft, all series, all models, have been produced in Hamburg (Germany) under approval DE.21G.0009 issued by LBA to Airbus.

Since July 21, 2008, A318 aircraft, all series, all models, are produced in Hamburg (Germany) under approval EASA 21G.0001 issued by EASA to Airbus.

Until July 20, 2008, a German Export Certificate of Airworthiness endorsed as noted under "Import Requirement," must be submitted for each individual aircraft for which application for U.S. certification is made.

Since July 21, 2008, a EASA Export Certificate of Airworthiness endorsed as noted under "Import Requirement", must be submitted for each individual aircraft for which application for U.S. certification is made.

Import Requirements:

A FAA Standard Airworthiness Certificate may be issued based on a German Export Certificate of Airworthiness (Export C of A), signed by a representative of the Luftfahrt-Bundesamt (LBA) of Germany on behalf of the European Community or based on a EASA Export C of A issued by a representative of EASA. The Export C of A should contain the following statement: "The aircraft covered by this certificate has been examined, tested, and found to conform to the FAA Type Design approved under Type Certificate No. A28NM and to be in a condition for safe operation."

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft."

Certification Basis:

- a. Part 25 of the FAR effective February 1, 1965, including Amendments 25-1 through 25-56 thereto.
 - a.1 Plus the following sections of Part 25 as amended by amendments 25-1 through 25-97 applied per the FAA derivative aircraft process to the changes and areas affected by the changes for all A318 models:

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25.21, 25.23, 25.25, 25.27, 25.29, 25.31, 25.101, 25.103, 25.105, 25.107, 25.109, 25.111, 25.113, 25.115, 25.117, 25.119, 25.121, 25.123, 25.125, 25.143, 25.145, 25.147, 25.149, 25.161, 25.171, 25.173, 25.175, 25.177, 25.181, 25.201, 25.203, 25.207, 25.231, 25.233, 25.235, 25.237, 25.251(e), 25.253, 25.255, 25.571 (welded structure only), 25.801, 25.803, 25.807, 25.809, 25.810, 25.811, 25.812, 25.813, 25.855, 25.857, 25.858, 25.1501, 25.1517, 25.1583, 25.1587
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a.2 Plus the following sections of Part 25 as amended by amendments 25-1 through 25-105 applied per the FAA derivative aircraft process to the changes and areas affected by the changes for the A318-121/-122 models,:

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25.361, 25.363, 25.367, 25.371, 25.901, 25.903, 25.933, 25.934, 25.939, 25.941, 25.943, 25.945, 25.1041, 25.1043, 25.1045, 25.1091, 25.1093, 25.1103, 25.1105, 25.1107, 25.1121, 25.1123, 25.1125, 25.1127, 25.1141, 25.1143, 25.1163, 25.1165, 25.1167, 25.1181, 25.1182, 25.1183, 25.1185, 25.1187, 25.1189, 25.1191, 25.1193
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a.3 Plus the following sections of Part 25 amended as indicated below per Airbus elect to comply:

25.305 Amdt. 86	25.415 Amdt 91
25.321 Amdt. 86	25.427 Amdt 86
25.331 Amdt. 91	25.445 Amdt 86
25.333 Amdt. 86	25.473 Amdt 91
25.335 Amdt. 91	25.479 Amdt 91
25.341 Amdt. 86	25.481 Amdt 91
25.343 Amdt 86	25.483 Amdt 91
25.345 Amdt 91	25.485 Amdt 91
25.349 Amdt. 86	25.491 Amdt 91
25.351 Amdt. 91	25.499 Amdt 91
25.363 Amdt 91	25.561(c) Amdt 91
25.371 Amdt 91	25.571 Amdt 86*
25.373 Amdt 86	25.735 Amdt 92
25.391 Amdt 86	25.853 Amdt 83
	25.1533 Amdt 92

- * Not applicable to welded structure
- a.4 Plus Section 25.772 & 25.795 amendment 25-106 per Airbus elect to comply.
- a.5 Plus portions of Section 25.562, Amendment 64, for the passenger seats only per Airbus elect to comply. FAR paragraphs 25.562(c)(5), (c)(6) do not apply.

- b. Based on 14 CFR Section 21.29(a) for new import Type Certificates (TCs), (or Section 21.101(g) for changes to TCs), applicable provisions of 14 CFR Part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.
- c. 14 CFR Part 34, effective September 10, 1990, including Amendments 34-1 through 34-3 thereto.
- d. 14 CFR Part 36, effective December 1, 1969, including Amendments 36-1 through 36-26 thereto. See Note 7. 14 CFR Part 36 through Amendment 36-31, Stage 5 for models A318-111 and A318-112. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.
- e. FAA Special Conditions issued for the A320 and A318-121/-122 in accordance with Section 21.16 of the FAR:
 - (1) No. 25-ANM-23, Effective December 15, 1988:
 - Electronic Flight Controls
 - Active Controls
 - Engine Controls and Monitoring
 - Protection from Lightning and Unwanted Effects of Radio Frequency (RF) Energy
 - Flight Characteristics
 - Flight Envelope Protection
 - Side Stick Controllers
 - Flight Recorder.
 - (2) No. 25-ANM-29, Effective May 31, 1989:
 - Computerized Airplane Flight Manual
 - (3) No. 25-299-SC, Effective October 27, 2005:
 - Sudden Engine Stoppage on Airbus Model A318 airplanes equipped with Pratt and Whitney PW6000
 engines
 - (4) No. 25-671-SC, Effective May 16, 2017:
 - Non-Rechargeable Lithium Batteries Applicable to Type design changes applied after May 16, 2017.
 Reference the applicability section of this special condition for more information on which Type design changes must meet it.
 - (5) No. 25-729-SC, Effective June 28, 2018:
 - Electronic System Security Protection from Unauthorized Internal Access Applicable to type design changes applied after June 28, 2018.
 - (6) No. 25-730-SC, Effective June 28, 2018:
 - Electronice System Security Protection from Unauthorized External Access Applicable to type design changes applied after June 28, 2018.
- f. For precision approach and landing, the applicable technical requirements are complemented by AC 120-29 and AC 120-28d.

For the automatic flight control system, the applicable technical requirements are complemented by AC 20-57A for automatic landing and by AC 25.1329-1A for cruise.

Use of JAR AWO where applicable to the requirements above, is acceptable.

- g. The following paragraphs of the FAR have been complied with through equivalent safety demonstrations:
 - 25.783(f) for passenger doors
 - 25.807(c) for maximum passenger capacity
 - 25.811(e)(3) Type III emergency exit marking.
 - 25.813(c) for emergency exit access
 - 25.831 Ventilation Packs off takeoff
 - 25.933 for flight critical thrust reverser systems.
- h. Optional Requirements elected:
 - 25.801 for ditching.
 - 25.1419 for icing.

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 Exemption No. 8812, dated December 21, 2006: As related to Section 25.901(c) of Part 25 for single failures that may result in uncontrollable high thrust conditions on Airbus Model A318 airplanes equipped with Pratt and Whitney PW6000 Engines.

Note 1:

The A318 basic type design definition for U.S. import certification is contained in the following documents:

- D03007678 for the A318-111 & A318-112 models
- D06003309 for the A318-121
- D06003310 for the A318-122

Note 2:

All A318 models are basically qualified for Cat IIIB precision approach.

This does not constitute operational approval.

Note 3:

The FAA has concluded that the occurrence of any uncontrollable high thrust failure condition, or any of the associated causal failures listed within the A318PW Trouble Shooting Manual, may endanger the safe operation of an airplane. Consequently, the FAA recommends that operators be encouraged to report such failures in accordance with paragraphs 121.703(c), 125.409(c) and 135.415(c).

Note 4:

If modification 37147 (Tech insertion program) is embodied in production or 38770 (Tech insertion program retofit) is embodied in service on A318 airplanes, the engine performance and gaseous emission levels are improved. The engine denomination changes to /3

Note 5:

If modification 38573 is embodied in service on A318 airplanes, the engine hardware configurations can be intermixed with one CFM56-5Bx/3 SAC (Tech Insertion) and one CFM56-5Bx/P SAC engine.

Note 6:

If modification 39673 is embodied on A318 airplanes, the two overwing emergency exits are deactivated.

- For overland flights, the aircraft is eligible for maximum capacity of 110 passengers.
- For overwater flights, the aircraft is eligible for maximum capacity of 32 passengers.

Note 7:

For noise, A318-121/-122 models are basically compliant with ICAO Annex 16 Chapter 4 requirements.

For A318-111/-112 models, the compliance with ICAO Annex 16 Chapter 4 requirements is achieved when modification 36521 is embodied.

Note 8:

On series A318-100 airplanes, introduction of standard of wingbox without dry bay (modification 37331) increases the wing fuel capacity by 350 liters.

Note 9:

If Modification 160001 for installation of structural provisions for new large wingtip device (Sharklet) is embodied on A318 series airplanes the usable fuel quantities are reduced as shown above to account for the loss of volume due to structural reinforcements in the wing and center wing box.

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II. Type A319-100 Series Transport Category Airplanes

- 1. Model A319-112, Approved August 30, 1996;
- 2. Model A319-111, Approved June 20, 1997;
- 3. Model A319-113, Approved June 20, 1997;
- 4. <u>Model A319-114</u>, Approved June 20, 1997;
- 5. <u>Model A319-131</u>, Approved June 20, 1997;
- 6. <u>Model A319-132</u>, Approved June 20, 1997;
- 7. Model A319-115, Approved October 22, 2002;
- 8. Model A319-133, Approved October 22, 2002;
- 9. <u>Model A319-151N Approved December 19, 2018;</u>
- 10. Model A319-171N Approved December 17, 2019;
- 11. Model A319-153N Approved January 23, 2020.

Engines:

Model A319-111, Two CFMI Model CFM56-5B5 or CFM56-5B5/P or CFM56-5B5/3 jet engines;

Model A319-112, Two CFMI Model CFM56-5B6 or CFM56-5B6/P or CFM56-5B6/2P or CFM56-5B6/3 jet engines;

Model A319-113, Two CFMI Model CFM56-5A4 or CFM56-5A4/F jet engines;

Model A319-114, Two CFMI Model CFM56-5A5 or CFM56-5A5/F jet engines;

Model A319-115, Two CFMI Model CFM56-5B7 or CFM56-5B7/P or CFM56-5B7/3 jet engines;

Model A319-131, Two IAE Model V2522-A5 jet engines;

Model A319-132, Two IAE Model V2524-A5 jet engines;

Model A319-133, Two IAE Model V2527M-A5 jet engines;

Model A319-151N, Two CFMI Model LEAP 1A24 jet engines;

Model A319-153N, Two CFMI Model LEAP 1A26 jet engines;

Model A319-171N, Two IAE Model PW1124G1-JM jet engines.

See Note 4 for description of "/P" engine models

See Note 9 for description of "/2P" engine models

See Note 10 for desription of "/F" engine models

See Note 12 for description of "/3" engine models

See Note 13 for description of " "engine models (Select One Package)

Fuel:

For A319-111,-112,-113,-114,-115,-131,-132,-133

See Installation Manual - Documents CFM 2026 or CFM 2129 or IAE-0043

TYPE	SPECIFICATION (NAME)					
	FRAN	CE	US	USA		U K
Kerosene	DCSEA 134-D	CSEA 134-D (F-34)		(JET A) (JET A1)	DEF STAN 91/91	(AVTUR) (JET A1)
			MIL-DTL- 83133-H	(JP 8)	DEF STAN 91/87 iss 7	(AVTUR/FSH) (JET A1) (AIA)
Wide cut			ASTM D 6615	(JET B)	DEF STAN 91/88	(AVTAG/FSH)
			MIL-DTL-5624	(JP 4)		
High flash point	DCSEA 144 C	(F-44)	MIL-DTL- 5624-V	(JP 5)	DEF STAN 91/86 iss 7	(AVCAT)

For A319-151N/-153N/-171N

See Service Bulletin LEAP-1A S/B 73-0001 or PW1000G-D-73 00-0002-00A-930A-D

TYPE	SPECIFICATION (NAME)					
	US	A	U	K		
Kerosene	ASTM D 1655	(JET A) (JET A1)	DEF STAN 91/91	(AVTUR) (JET A1)		

TYPE	SPECIFICATION (NAME)				
	USA		UK		
	MIL-DTL- 83133-H	(JP 8)	DEF STAN 91/87 iss 7	(AVTUR/FSII) (JET A1) (AIA)	
High flash point	MIL-DTL-5624- V	(JP 5)	DEF STAN 91/86 iss 7	(AVCAT)	

Additives: See CFMI CFM 56 " Specific Operating Instructions," CMF TPOI-13 or IAE V2500 "Installation and Operating Manual" IAE-0043, 4.5 or the "Standard Practices and Processes Manual" in the IETM or Service Bulletin LEAP-1A S/B 73-0001 or Service Bulletin PW1000G-D-73-00-0002-00A-930A-D.

The above mentioned fuels and additives are also suitable for the APU.

Engine Limits:

Englie Emilio:	CFMI CFM56-5B5*** or - 5B5/P or -5B5/3	CFMI CFM56-5B6*** or -5B6/P or -5B6/2P or -5B6/3	CFMI CFM56-5A4	CFMI CFM56-5A4/F
Engine Limitation	FAA Data Sheets E37NE E38NE	FAA Data Sheets E37NE E38NE	FAA Data Sheet E28NE	FAA Data Sheet E28NE
Static Thrust at Sea Level				
- Take-off (5 min)**	9 786 daN	10 453 daN	9 786 daN	9 786 daN
(Flat rated 30°C)	(22,000 lb)	(23,500 lb)	(22,000 lb)	(22,000 lb)
Maximum Continuous (Flat rated 25°C)	9 008 daN (20,250 1b)	9 008 daN (20,250 1b)	9 195 daN (20,670 1b)	9 195 daN (20,670 1b)
(Flat fated 25 C)	(20,230 10)	(20,230 10)	(20,070 10)	(20,070 10)
Maximum Engine Speed				
- N1 rpm (%)	5,200 (104)	5,200 (104)	5,100 (102)	5,100 (102)
- N2 rpm (%)	15,183 (105)	15,183 (105)	15,183 (105)	15,183 (105)
Max Gas Temperature (°C)				Eng. Limit/ ECAM
- Take-off (5 min)**	950	950	890	915/890
- Max Continuous	915	915	855	880/855
- Starting *	725	725	725	725/725
Max Oil Temperature (supply pump inlet; °C)				
- Take-off, Stabilized	140	140	140	140
- Transient (15 min max)	155	155	155	155
Min. Press. (PSI)	13	13	13	13
Approved Oils	See SB	See SB	See SB	See SB CFMI
	CFMI 79-001-0X	CFMI 79-001-0X	CFMI 79-001-0X	79-001-0X

	CFMI CFM56-5A5	CFMI CFM56-5A5/F	IAE V2522-A5	IAE V2524-A5
Engine Limitation	FAA Data Sheets	FAA Data Sheet	FAA Data Sheets	FAA Data Sheets
	E28NE (FAA)	E28NE (FAA)	E40NE (FAA)	E40NE (FAA)
Static Thrust at Sea				
Level				
- Take-off (5 min)**	10 453 daN	10 453 daN	10 249 daN	10 889 daN
(Flat rated 30°C)	(23,500 lb)	(23,500 lb)	(23,040 lb)	(24,480 lb)
Maximum Continuous	9 195 daN	9 195 daN	8 540 daN	8 540 daN
(Flat rated 25°C)	(20,670 1b)	(20,670 1b)	(19,200 1b)	(19,200 1b)
Maximum Engine				
Speed				
- N1 rpm (%)	5,100 (102)	5,100 (102)	5,650 (100)	5,650 (100)
- N2 rpm (%)	15,183 (105)	15,183 (105)	14,950 (100)	14,950 (100)

	CFMI CFM56-5A5	CFMI CFM56-5A5/F	IAE V2522-A5	IAE V2524-A5
Engine Limitation	FAA Data Sheets	FAA Data Sheet	FAA Data Sheets	FAA Data Sheets
	E28NE (FAA)	E28NE (FAA)	E40NE (FAA)	E40NE (FAA)
Max Gas Temperature	· /	Eng. Limit/ ECAM	Eng. Limit/ ECAM	Eng. Limit/ ECAM
(°C)			8	5
- Take-off (5 min)**	890	915/890	625/635	635/635
- Max Continuous	855	880/855	610/610	610/610
- Starting *	725	725/725	635/635	635/635
Max Oil Temperature				
(supply pump inlet;				
°C)				
- Take-off, Stabilized	140	140	155	155
- Transient (15 min	155	155	165	165
max)				
Min. Press. (PSI)	13	13	60	60
Approved Oils	See SB	See SB CFMI	See Doc IAE 0043 Sec	See Doc IAE 0043 Sec
			4.9	4.9
	CFMI 79-001-0X	79-001-0X	(MIL-L-23699)	(MIL-L-23699)

Engine Limits Contin	<u>nued:</u>				
	CFMI CFM56-5B7	IAE V2527M-A5	CFMI LEAP-1A24	CFMI LEAP-1A26	PW1124G1-JM
	*** or -5B7/P or -				
	5B7/3				FAA Data Sheet
Engine Limitation	FAA Data Sheets	FAA Data Sheet	FAA Data Sheet	FAA Data Sheet	E00087EN
	E37NE E38NE	E40NE	E000089EN	E000089EN	
Static Thrust at Sea					
Level					
- Take-off (5 min)**	12 010 daN	11 031 daN	10 680 daN	12 064 daN	10 782 daN
(Flat rated 30°C)	(27,000 lb)	(24,800 lb)	(24, 010lb)	(27,120lb)	(24,240lb)
- Maximum Continuous	10 840 daN	9 893 daN	10 676daN	11 868 daN	10 691 daN
(Flat rated 25°C)	(24,370 1b)	(22,240 1b)	(24, 000lb)	(26,680lb)	(24,035lb)
Maximum Engine Speed					
- N1 rpm (%)	5,200 (104)	5,650 (100)	3,894(101)	3,894(101)	10,047(105)
- N2 rpm (%)	15,183 (105)	14,950 (100)	19,391(116.5)	19,391(116.5)	22,300(105)
Max Gas Temperature					
(°C)					
- Take-off (5 min)**	950	645	1060	1060	1083
- Max Continuous	915	610	1025	1025	1043
- Starting *	725	650	875	875	1083
Max Oil Temperature					
(supply pump inlet; °C)					
- Take-off, Stabilized	140	155	140	140	152
- Transient (15 min max)	155	165	155	155	141
Min. Press. (PSI)	13	60	29 redline/17.4 idle	29 redline/17.4 idle	63
Approved Oils	See SB	See Doc IAE 0043	See SB	See SB	See SB
		Sec 4.9			PW1000G-D-79-
	CFMI 79-001-0X	(MIL-L-23699)	79-0001	79-0001	00-0002-00A-
					930A-D

^{* 4} consecutive cycles of 2 minutes each.

<u>Airspeed Limits (Indicated Airspeed - IAS - Unless Otherwise Stated:</u>

- Maximum Operating Mach

- MMO: 0.82 - VMO: 350 kt

- Maximum Operating Speed

- Maneuvering Speed VA:

- See the Limitations Section of Aircraft Flight Manual

- Extended Flaps/Slats Speed

- VFE

^{** 10} minutes at take-off thrust allowed in case of engine failure (at take off and during go around).

^{***} See Note 17 for engine models no longer in production/service

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Configuration	Slats/Flaps	VFE (kt)	
1	18/0	230	Intermediate Approach
	*18/10	215	Take-off
2	22/15	200	Take-off and Approach
3	22/20	185	Take-off, Approach, and Landing
Full	27/40	177	Landing

^{*} Auto flap retraction at 210 kt in Take-off configuration.

Landing Gear:

- VLE - Extended: 280 kt/Mach 0.67

- VLO - Extension: 250 kt - Retraction: 220 kt

Tire Limit Speed (Ground Speed) = 195.5 kt (225 mph)

Maximum Weights:

For A319-111,-112,-113,-114,-115,-131,-132,-133

		00		01	-	02	_	03	-	05
VARIANT	BA	SIC	Mod	25328	Mod	27112	Mod	26457	Mod	28136
	(KG)	(LBS)								
Max. Take-Off Weight	64,000	141,090	70,000	154,322	75,500	166,447	68,000	149,913	70,000	154,322
Max. Landing Weight	61,000	134,480	61,000	134,480	62,500	137,787	61,000	134,480	62,500	137,787
Max. Zero Fuel Weight	57,000	125.660	57,000	125,660	58,500	128,969	57,000	125,660	58,500	128,969

Minimum Weight:

VARIANT	All		
	(KG) (LBS)		
Minimum Weight	35,400 78,042		

For A319-151N/-153N/-171N:

VARIANT	050 Mod 161385			053 Mod 161388	054 Mod 161389	055 161390	
VARGATOT	(KG) (LBS)	(KG) (LBS)	Mod 161387 (KG) (LBS)	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)	
Max. Take-Off Weight	64,000 141,095	64,000 141,095	70,000 154,323	70,000 154,323	75,500 166,447	75,500 166,447	
Max. Landing Weight	62,800 138,450	63,900 140,875	62,800 138,450	63,900 140,875	62,800 138,450	63,900 140,875	
Max. Zero Fuel Weight	58,800 129,631	60,300 132,938	58,800 129,631	60,300 132,938	58,800 129,631	60,300 132,938	

Minimum Weight:

VARIANT	All		
	(KG) (LBS)		
Minimum Weight	39,600 87,304		

Minimum Crew:

2 Pilots

Maximum Passengers:

145

See note $11,\,18$ and 22

Maximum Baggage:

CARGO COMPARTMENT	MAXIMUM LOAD
	(KG) (LBS)
Forward	2,268 5,000
Aft	3,021 6,660
Rear (Bulk)	1,497 3,300

For the positions and the loading conditions authorized in each position (references of containers, pallets, associated weights), see Weight and Balance Manual, Ref. 00J080A0001/C1S Chapter 1.10.

Fuel Capacity (0.8 kg/liter)

For A319-111,-112,-113,-114,-115,-131,-132,-133

		3-Tank Airplane		
Tank	Usab	le Fuel	Unusal	ole Fuel
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
Wing	15,609	4,124	58.9	15.6
	(12,487)	(27,531)	(47.1)	(103.9)
Center	8,250	2,179	23.2	6.1
	(6,600)	(14,551)	(18.6)	(41.0)
TOTAL	23,859	6,303	82.1	20.8
	(19,087)	(42,082)	(65.7)	(144.9)

		4 to 9-Tank Airplane (*	()	
Tank	Usabl	le Fuel	Unusal	ole Fuel
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
TOTAL				
3-Tank	23,859	6,303	82.1	20.8
Airplane	(19,087)	(42,082)	(65.7)	(144.9)
ACT 1	3,121	824	17	4.3
	(2,497)	(5,505)	(13.6)	(28.8)
TOTAL				
4-Tank	26,980	7,128	99.1	25.1
Airplane	(21,584)	(47,587)	(79.3)	(173.7)
ACT 2	3,121	824	17	4.3
	(2,497)	(5,505)	(13.6)	(28.8)
TOTAL		. ,		
5-Tank	30,101	7,952	116.1	29.4
Airplane	(24,081)	(53,092)	(92.9)	(202.5)
ACT 3	2,186	577	22	5.6
	(1,749)	(3,855)	(17.6)	(37.4)
TOTAL				
6-Tank	32,287	8,530	138.1	35.0
Airplane	(25,830)	(56,947)	(110.5)	(239.9)
ACT 4	2,186	577	22	5.6
	(1,749)	(3,855)	(17.6)	(37.4)
TOTAL				
7-Tank	34,473	9,107	160.1	40.6
Airplane	(27,579)	(60,803)	(128.1)	(277.3)
ACT 5	3,046	804	12	3.1
	(2,437)	(5,372)	(9.6)	(20.6)
TOTAL				
8-Tank	37,519	9,912	172.1	43.7
Airplane	(30,016)	(66,176)	(137.7)	(297.9)
ACT 6	3,121	824	17	4.3
	(2,497)	(5,505)	(13.6)	(28.8)
TOTAL		, , ,		. ,
9-Tank	40,640	10,737	189.1	48.0
Airplane	(32,513)	(71,681)	(151.3)	(326.7)

^(*) See note 7

Fuel Capacity (0.8 kg/liter) continued

A319-100 with modification 160001 (Structural Provisions for Sharklet – see note 20):

		3-Tank Airplane		
Tank	Usab	le Fuel	Unusable Fuel	
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
Wing	15,569	4,113	58.9	15.6
	(12,455)	(27,458)	(47.1)	(103.9)
Center	8,248	2,178	23.2	6.1
	(6,598)	(14,546)	(18.6)	(41.0)
TOTAL	23,817	6,291	82.1	21.7
	(19,054)	(42,007)	(65.7)	(144.9)

		4 to 9-Tank Airplane (*	')	
Tank	Usab	le Fuel	Unusal	ble Fuel
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
TOTAL				
3-Tank	23,817	6,291	82.1	21.7
Airplane	(19,054)	(42,007)	(65.7)	(144.9)
ACT 1	2.992	790	17	4.3
	(2,393)	(5,275)	(13.6)	(28.8)
TOTAL				
4-Tank	26,809	7,082	99.1	25.1
Airplane	(21,447)	(47,282)	(79.3)	(173.7)
ACT 2	2.992	790	17	4.3
	(2,393)	(5,275)	(13.6)	(28.8)
TOTAL			,	
5-Tank	29.801	7,872	116.1	29.4
Airplane	(23.841)	(52.557)	(92.9)	(202.5)
ACT 3	2,186	566	22	5.6
	(1,749)	(4.313)	(17.6)	(37.4)
TOTAL			,	
6-Tank	32,245	8,518	138.1	35.0
Airplane	(25,796)	(56,870)	(110.5)	(239.9)
ACT 4	2,186	577	22	5.6
	(1,749)	(3,855)	(17.6)	(37.4)
TOTAL				
7-Tank	34,431	9,095	160.1	40.6
Airplane	(27,545)	(60,725)	(128.1)	(277.3)
ACT 5	3,046	804	12	3.1
	(2,437)	(5,372)	(9.6)	(20.6)
TOTAL		\ <i>,</i>	, ,	, , ,
8-Tank	37,477	9,899	172.1	43.7
Airplane	(29.982)	(66,097)	(137.7)	(297.9)
ACT 6	3,121	824	17	4.3
	(2,497)	(5,505)	(13.6)	(28.8)
TOTAL			, ,	Ì
9-Tank	40,598	10,723	189.1	48.0
Airplane	(32,479)	(71,602)	(151.3)	(326.7)

(*) See note 7

For A319-151N/-153N/-171N:

101 1(31)-1311W-13.	3-Tank Airplane			
	Usable Fuel Unusable Fuel			
	Liters (kgs)	Gallons (lbs)	Liters (kgs)	Gallons (lbs)
Wing	15 477 (12 428)	4 088 (27 399)	58.9 (47.3)	15.5 (104.3)

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		3-Tank Airplane		
	Usabl	Usable Fuel Unusable Fuel		
Center	8 248	2179	23.2	6.1
	(6 623)	(14601)	(18.6)	(41.0)
Total	23 725	6267	82.1	21.6
	(19 051)	(42000)	(65.9)	(145.3)

Oil Capacity

CFMI CFM56-5B - Engine Oil Capacity, 10 quarts/engine (9.46 liters). IAE V2500-A5 - Engine Oil Capacity, 7 quarts/engine (6.6 liters) CFMI LEAP-1A - Engine Oil Capacity 21,3 quarts/engine (20,1 liters) IAE PW1100G-JM - Engine Oil Capacity 34.9 quarts/engine (33.0 liters)

Maximum Operating Altitude:

- 41,000 feet (12,600 m) clean if modification 28162 is embodied.
- 39,800 feet (12,200 m) clean if modification 30748 is embodied.
- 39,100 feet (12,000 m) clean.
- 20,000 feet (6,500 m) Slats/Flaps extended.
- 26,000 feet (7,900 m) Slats/Flaps extended if modification 164515 is embodied.

Equipment:

The basic equipment as prescribed in the airworthiness regulations (see certification basis) must be installed in the aircraft for certification.

Equipment approved for installation are listed in the definition of the reference model and the modifications applicable to it. Refer to Type Certification Standard Equipment Lists:

- -00J000A0012/C0S for A319-111 Model
- -00J000A0004/C0S for A319-112 Model
- -00J000A0113/C0S for A319-113 Model
- -00J000A0114/C0S for A319-114 Model
- -00J000A0131/C0S for A319-131 Model
- -00J000A0132/C0S for A319-132 Model
- -00J000A0115/C0S for A319-115 Model
- -00J000A0133/C0S for A319-133 Model

There is no Type Certificate Standard Equipment List for the A319-151N/-153N/-171N.

Refer to Note 1 for list of A319 airplane model FAA Type Definitions.

Serial Numbers Eligible:

Until September 26, 2004, A319 aircraft, all series, all models, have been produced in Hamburg (Germany) under approval LBA.G.0009 or I-A9 issued by LBA to Airbus.

From September 27, 2004 until July 20, 2008, A319 aircraft, all series, all models, have been produced in Hamburg (Germany) under approval DE.21G.0009 issued by LBA to Airbus.

From July 21, 2008 until May 5, 2009, A319 aircraft, all series, all models, have been produced in Hamburg (Germany) under approval EASA.21G.0001 issued by EASA to Airbus.

Since May 6, 2009, All A319 aircraft, all series, all models, are produced in Hamburg (Germany) or Tianjin (People's Republic of China) under approval EASA.21G.0001 issued by EASA to Airbus.

Since March 8 2016, A319 aircraft, all series, all models, are produced in Hamburg (Germany), Tianjin (People's Republic of China) or Mobile (USA) under approval EASA.21.G.0001 issued by EASA to Airbus.

Since February 2016, A319 aircraft, all series, all models, are produced in Hamburg (Germany), Tianjin (People's Republic of China) or Mobile (USA) and delivered from Hamburg (Germany), Tianjin (People's Republic of China), Blagnac (France) or Mobile (USA) under approval EASA.21.G.0001 issued by EASA to Airbus.

Until July 20, 2008, a German Export Certificate of Airworthiness endorsed as noted under "Import Requirement," must be submitted for each individual aircraft for which application for U.S. certification is made.

Since July 21, 2008, a EASA Export Certificate of Airworthiness endorsed as noted under "Import Requirement", must be submitted for each individual aircraft for which application for U.S. certification is made.

<u>Import Requirements:</u>

A FAA Standard Airworthiness Certificate may be issued based on a German Export Certificate of Airworthiness (Export C of A), signed by a representative of the Luftfahrt-Bundesamt (LBA) of Germany on behalf of the European Community or based on a EASA Export C of A issued by a representative of EASA. The Export C of A should contain the following statement: "The

aircraft covered by this certificate has been examined, tested, and found to conform to the Type Design approved under FAA Type Certificate No. A28NM and to be in a condition for safe operation."

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, Airworthiness Certification of Aircraft, for requirements for issuance of an airworthiness certificate for imported aircraft."

Certification Basis:

e.

- a. Part 25 of the FAR effective February 1, 1965, including Amendments 25-1 through 25-56 thereto.
- a.1 Plus the following sections of Part 25 as amended by amendments 25-1 through:
 - -25-58 (Section 25.812(e))
 - -25-63 (Section 25.25 (a)(3))
 - -25-67 (Section 25.807 (c)(7))

(Applied per FAA derivative aircraft policy – reference FAA order 8110.4A)

- a.2 Airbus elected to comply with the following sections of Part FAR 25 through Amendment 86: 25.305(d), 25.321(e)/(d), 25.331(a)/(d), 25.333(a)/(e),25.335(d), 25.341, 25.343 (b)(1)(ii), 25.345(a)/(e), 25.349(b), 25.351(b),25.371, 25.373(a), 25.391(e), 25.427, 25.445(a), 25.571(b)(2)/(b)(3), 25.1517.
- a.3 Airbus elected to comply with portions of FAR 25.562, Amendment 64, for the passenger seats only. FAR paragraphs 25.562(c)(5), (c)(6) do not apply.
- b. Based on 14 CFR Section 21.29(a) for new import Type Certificates (TCs), (or Section 21.101(g) for changes to TCs), applicable provisions of 14 CFR Part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.
- c. 14 CFRPart 34 of the FAR effective Sept. 10, 1990, including amendment 34-1.
- d. 14 CFR Part 36 of the FAR effective December 1, 1965, including amendments 36-1 through 36-20 thereto. See Note 16. 14 CFR Part 36 through Amendment 36-31, Stage 5 for models; A319-111, A319-112, A319-132. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.
 - FAA Special Conditions issued for the A320 in accordance with Section 21.16 of the FAR:
 - (1) No. 25-ANM-23, Effective December 15, 1988:
 - Electronic Flight Controls
 - Active Controls
 - Engine Controls and Monitoring
 - Protection from Lightning and Unwanted Effects of Radio Frequency (RF) Energy
 - Flight Characteristics
 - Flight Envelope Protection
 - Side Stick Controllers
 - Flight Recorder.
 - (2) No. 25-ANM-29, Effective May 31, 1989:
 - Computerized Airplane Flight Manual
 - (3) No. 25-671-SC, Effective May 16, 2017:
 - Non-Rechargeable Lithium Batteries Applicable to Type design changes applied after May 16, 2017.
 Reference the applicability section of this special condition for more information on which Type design changes must meet it.
 - (4) No. 25-729-SC, Effective June 28, 2018:
 - Electronic System Security Protection from Unauthorized Internal Access Applicable to type design changes applied after June 28, 2018.
 - (5) No. 25-730-SC, Effective June 28, 2018:

- Electronice System Security Protection from Unauthorized External Access Applicable to type design changes applied after June 28, 2018.
- f. For precision approach and landing, the applicable technical requirements are complemented by AC 120-29 and AC 120-28c.

For the automatic flight control system, the applicable technical requirements are complemented by AC 20-57A for automatic landing and by AC 25.1329-1A for cruise.

Use of JAR AWO where applicable to the requirements above, is acceptable.

- g. The following paragraphs of the FAR have been complied with through equivalent safety demonstrations:
 - 25.101, 25.105, 25.109, 25.113, 25.115, 25.735, for rejected takeoff and landing performance
 - 25.783(f) for passenger doors
 - 25.807(c) for maximum passenger capacity
 - 25.813(c) emergency exit access for a single 13 inch aisle
 - 25.933(a), 25.1309(b) for thrust reversing system
 - 25.811(e)(3) Type III emergency exit marking.
- h. Optional Requirements elected:
 - 25.801 for ditching
 - 25.1419 for icing

Certification Basis for Airbus Model A319 series airplanes with modification 160500 or 160080 installation of large wingtip device (Sharklet) see note 21:

The original certification basis for the Model A319 shown above for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-129 (i.e., the amendment in affect on the date of application April 8, 2010) applied to the components and areas affected by the change:

25.23, 25.25, 25.101, 25.109, 25.113, 25.115, 25.117, 25.161, 25.171, 25.173, 25.203, 25.235, 25.251, 25.301, 25.303, 25.305, 25.307(a)(d), 25.321, 25.331, 25.333, 25.335, 25.337, 25.341(a)(b), 25.343, 25.345, 25.349, 25.351, 25.365(a)(b)(d), 25.367, 25.371, 25.373, 25.391, 25.393(b), 25.427, 25.445, 25.457, 25.459, 25.471(a)(b), 25.473, 25.479(a)(c)(d), 25.481(a)(c), 25.483, 25.485, 25.489, 25.581, 25.601, 25.603, 25.605, 25.607, 25.609, 25.613, 25.619, 25.623, 25.625, 25.629, 25.631, 25.651, 25.671, 25.672, 25.683(b), 25.903(d)(1), 25.1011(b), 25.1385(a)(b)(d), 25.1387(a)(b)(c)(d), 25.1389, 25.1391, 25.1393, 25.1395, 25.1397, 25.1401, 25.1505, 25.1511, 25.1515, 25.1517, 25.1527, 25.1533, 25.1535, 25.1581, 25.1585(a)

Plus the following sections of 14 CFR part 25 amended as indicated below applied to the components and areas affected by the change per Airbus reversion justification:

25.21 Amdt 120 ¹	25.181 Amdt 107 ²
25.103 Amdt 107 ^{1&2}	25.201 Amdt 107 ²
25.105 Amdt 120 ¹	25.207 Amdt 107 ^{1&2}
25.107 Amdt 107 ^{1&2}	25.231 Amdt 107 ²
25.111 Amdt 120 ¹	25.233 Amdt 107 ²
25.119 Amdt 107 ^{1&2}	25.237 Amdt 107 ^{1&2}
25.121 Amdt 107 ^{1&2}	25.253 Amdt 120 ¹
25.123 Amdt 120 ¹	25.571(a)(b)(e) Amdt 86 ³
25.125 Amdt 107 ^{1&2}	25.981 Amdt 56 ⁴
25.143 except (g) Amdt 107 ^{1&2}	25.1001 Amdt 107 ¹
25.143(g) at Amdt 108 ¹	25.1301 Amdt 56 ⁵
25.145 Amdt 97 ^{1&2}	25.1309 Amdt 56 ⁵
25.147 Amdt 107 ²	25,1419 Amdt 56 ¹
25.149 Amdt 107 ²	25.1587 Amdt 107 ¹
25.175 Amdt 107 ²	

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Notes:

- 1. FAA acceptance of these reversions was based on the fact that Airbus has done additional testing above the requirements incorporated by reference as documented in EASA AMC-F14, dated November 29, 1993, Flight in Icing Conditions, and a determination that compliance with the amendment in effect on the date of application for these rules (i.e., Amendment 25-121) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3). EASA AMC-F14 is incorporeated as part of certification basis for this airplane.
- 2. FAA acceptance of these reversions was based on fact that Airbus will show compliance with FAA Special Condtion 25-ANM-23 for V_{SR} and a determination that compliance with the amendment in effect on the date of application for these rules (i.e., Amendment 25-108) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).
- 3. FAA acceptance of this reversion was based on a determination that compliance with the amendment in affect on the dated of application for this rule (i.e., Amendment 25-96) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).
- 4. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-102) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).
- 5. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).

Plus the following sections of part 25 amended as indicated below based on Airbus elect to comply:

25.107(e)(1)(iv) Amendment 25-135 25.177 Amendment 25-135

Special conditions:

The FAA Special Conditions applicable to each model as defined above remain applicable to aircraft equipped with Sharklet, except Paragraph 2 – Active Controls of FAA Special Condition 25-ANM-23 is replaced with the following special conditions:

- No. 25-469-SC Effective October 11, 2012 "Interaction of Systems and Structures"
- No. 25-470-SC Effective October 11, 2012 "Design Dive Speed"
- No. 25-471-SC Effective October 11, 2012 "Design Roll Maneuver Conditions"

Equivalent Safety Findings (ESFs):

The original ESFs applicable to each model as defined above remain effective for aircraft equipped with Sharklet plus the following ESF for aircraft equipped with Sharklet:

25.331 – Use of EASA Certification Specification (CS) 25.331 in lieu of 14 CFR 25.331 for checked pitch maneuver (reference ELOS memorandum TD000885IB-T-A-5)

25.1419 – Analysis instead of flight testing in natural icing conditions (reference ELOS memorandum TD00885IB-T-SE-1)

Noise standards

14 CFR 21.93(b) - No acoustical change

Fuel venting and exhaust emissions standards

Not affected by the change. The initial requirements remain applicable.

Optional Requirements elected

- 25.801 for ditching.
- 25.1419 for icing.
- 25.1535 for ETOPS

Part 26

14 CFR part 26 effective December 10, 2007, including Amendments 26-1 through 26-3.

Certification basis for the Airbus Model A319-111, -112, -113, -114, -115, -131, -132 and -133 installed with Wing Tip Fence (WTF) and Modification 157777 (Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 150 passengers:

The original certification basis for the Model A319-111, -112, -113, -114, -115, -131, -132 and -133 installed with WTF plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-141 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	141	Fuselage Structure
25.321	141	Fuselage Structure
25.331(a)(b)(c)(1)	141	Fuselage Structure
25.341(a)	141	Fuselage Structure
25.351	141	Fuselage Structure
25.473	141	Fuselage Structure
25.479(a)(c)(d)	141	Fuselage Structure
25.481(a)(c)	141	Fuselage Structure
25.489	141	Fuselage Structure
25.801(d)	141	Entire Airplane
25.803(c)	141	Cabin Interior
25.807	141	Cabin Interior
25.810	141	Cabin Interior
25.811	141	Cabin Interior
25.813	141	Cabin Interior
25.815	141	Cabin Interior
25.1447(c)(1)	141	Passenger equipment associated with increased MPSC
25.1529	141	ICA associated with increased MPSC
25.1541(a)(b)	141	Marking & Placards associated with increased MPSC
25.1557(a)	141	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-141 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment
	Level
25.305(a)(b), 25.307(a), 25.331(c)(2), 25.365(a), 25.341(b), 25.561, 25.571(a)(b), 25.785, 25.787(a)(b), 25.789(a), 25.791, 25.809, 25.812(e)(k)(l), 25.853(a)(b),	56
25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(e)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	
25.562	64
25.853(c)(d)(e)	116

Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification 157777 (MaxPax):

AT10438IB-T-CS-2

§ 25.807 Emergency Exits

Finding for Increase of the Maximum Passenger Capacity (MPSC) from 145 passengers to 150 passengers

Optional Design Regulations:

ETOPS:

Model A319-111, -112, -113, -114, -115, -131, -132 and -133 airplanes installed with WTF and 157777 (MaxPax) have not been evaluated for extended operations (ETOPS) type design approval.

Part 26:

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width, starting at the aircraft aisle centerline and extending 21 inches outboard from the aircraft aisle centerline, must be a minimum of 23.2 inches. Any attendant seat/fixture installed on the side of the exit passageway must not result in a passageway less than 23.2 inches for the inboard portion of the passageway. The remaining passageway (starting 21 inches from the aircraft centerline to the emergency exit) must be a minimum of 20 inches. The height of the attendant seat/fixture is limited to a maximum height of 56.5 inches.
- The unobstructed exit dimensions of the floor level emergency exits must not be less than 32 inches x 73 inches.
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at doors 1 and 4.
- The wide slides installed at doors 1 and 4 must have a beam strength meeting the requirements of TSO C69c.

Certification basis for the Airbus Model A319-111, -112, -113, -114, 115, 131, -132 & 133 installed with Wing Tip Fence (WTF) and modification 159535 (Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 160 passengers:

The original certification basis for the Model <u>A319-111, -112, -113, -114, 115, 131, -132 & 133</u> plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-143 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	143	Fuselage Structure
25.321	143	Fuselage Structure
25.331(a)(b)(c)(1)	143	Fuselage Structure
25.341(a)	143	Fuselage Structure
25.351	143	Fuselage Structure
25.473	143	Fuselage Structure
25.479(a)(c)(d)	143	Fuselage Structure
25.481(a)(c)	143	Fuselage Structure
25.489	143	Fuselage Structure
25.795(d)	143	Cabin Interior excl lavatories
25.801(d)	143	Entire Airplane
25.803(c)	143	Cabin Interior
25.807(g)	143	Cabin Interior

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.810	143	Cabin Interior
25.815	143	Cabin Interior
25.1447(c)(1)	143	Passenger equipment associated with increased MPSC
25.1519	143	Entire Airplane
25.1529	143	ICA associated with increased MPSC
25.1541(a)(b)	143	Marking & Placards associated with increased MPSC
25.1557(a)	143	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-143 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
25.305(a)(b),25.307(a),25.331(c)(2),25.341(b) 25.365(a), 25.561, 25.571(a)(b), 25.785, 25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(k)(l), 25.813, 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.562	64
25.853(c)(d)(e)	116
25.365(a), 25.901(c)	136

Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification <u>159536</u> (MaxPax):

CS-7

§ 25.807 Emergency Exits

Finding for Increase of the Maximum Passenger Capacity (MPSC) from 145 passengers to 160 passengers

Optional Design Regulations:

ETOPS:

Model <u>319-111, -112, -113, -114, 115, 131, -132 & 133</u> airplanes installed with modification <u>159535</u> (MaxPax) have not been evaluated for extended operations (ETOPS) type design approval.

Part 26:

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width must meet the regulatory minimum of 20 inches. The height of the attendant seat or other assembly is limited to a maximum height of 57 inches.
- The unobstructed exit dimensions of the forward and aft most floor level emergency exits must not be less than 32 inches x 73 inches.
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at the forward and aft
 most exits.

 The wide slides installed at the forward and aft most floor level exits must have a beam strength meeting the requirements of TSO-C69c.

Certification basis for the Airbus Model A319-151N/-153N/-171N (Single Aisle New Engine Option):

The certification basis for the Airbus Model A319 series airplanes with Modification 160500 - installation of large wingtip device (Sharklet) for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-136 (i.e., the amendment in affect on the date of application) applied to the components and areas affected by the change:

25.3, 25.23(a)(b), 25.25(a)(b), 25.27, 25.101, 25.107(e)(1)(iv), 25.109, 25.113, 25.115, 25.117, 25.147, 25.149, 25.161, 25.171, 25.173, 25.175, 25.177, 25.181, 25.201, 25.203, 25.231, 25.233, 25.235, 25.251(a)(b)(c)(d)(e), 25.253(a)(b), 25.255, 25.301*, 25.303*, 25.305(a)(b)(c)*, 25.307(a)(d)*, 25.321(a)(b)(c)(d), 25.331(a)(b)(c), 25.333(a)(b),25.335(a)(b)(c)(d)(e)(f), 25.337, 25.341(a)(b), 25.343(a)(b), 25.345(a)(b)(d), 25.349(a)(b), 25.351, 25.361, 25.363, $25.365(a)(b)(c)(d)(e)^*$, 25.367(a)(b), 25.371, 25.373, 25.391(a)(b)(c)(d)(e), 25.427(a)(b)(c)(d), 25.445(a)(b), 25.457, 25.459, 25.471(a)(b), 25.473, 25.479(a)(c)(d), 25.481(a)(c), 25.483, 25.485(a)(b), 25.489, 25.491, 25.493(b)(c)(d), 25.495, 25.499(a)(b)(c)(d)(e), 25.503(a)(b), 25.507(a)(b)(c), 25.509(a)(c)(d), 25.511, 25.519(a)(b)(c), 25.563, 25.581, 25.601*, 25.603, 25.605, 25.607, 25.609*, 25.613, 25.619*, 25.623*, 25.625, 25.629, 25.631*, 25.651*, 25.671, 25.672(a)(b)(c), 25.683(b), 25.703(a)(b)(c), 25.721(a)(b)(c), 25.777, 25.779(b), 25.789, 25.801, 25.841(a), 25.843(b), 25.851(b), 25.855(c), 25.863 (a)(b)(c)(d), 25.865, 25.867(a)(b)*, 25.869(a)(b)(c), 25.901(a)(b)(c), 25.903, 25.904, 25.933(a), 25.934, 25.939 (a)(c), 25.943, 25.951(a)(b)(c)(d)*, 25.952(a)(b), 25.954, 25.955(a), 25.959, 25.961, 25.963(a)(d), 25.969, 25.971, 25.975, 25.981 except 25.981(a)(3)**, 25.993(a)(b)(c)(d)(e), 25.994, 25.995, 25.997(a)(b)(c)(d), 25.999(a)(b), 25.1001, 25.1011(a)(b), 25.1013(a)(b)(c)(d)(e)(f), 25.1015(a)(b), 25.1017(a)(b), 25.1017(a25.1019(a), 25.1021(a)(b), 25.1023(a)(b), 25.1025(a)(c), 25.1041, 25.1043(a)(b)(c), 25.1045(a)(b)(c), 25.1045(a)(c), 25.104(a)(c), 25.104(a)(c), 25.104(a)(c), 25.104(a)(c), 25.104(a)(c), 25.104(a)(c), 25.104(25.1091(a)(b)(c)(d)(e), 25.1093(b), 25.1103(b)(c)(d), 25.1121, 25.1123, 25.1141, 25.1143, 25.1145, 25.1155, 25.1163, 25.1165, 25.1167, 25.1181, 25.1182, 25.1183, 25.1185, 25.1187, 25.1189, 25.1191, 25.1193, 25.1195, 25.1197, 25.1199, 25.1201, 25.1203, 25.1207, 25.1301*, 25.1305, 25.1309*, 25.1316, 25.1317, 25.1337, 25.1353(a)(b)*, 25.1355(c), 25.1357(a)*, 25.1363, 25.1401(b), 25.1403, 25.1431*, 25.1438, 25.1461, 25.1501, 25.1503, 25.1507, 25.1511, 25.1513, 25.1515, 25.1517, 25.1519, 25.1521(a)(c)(d), 25.1525, 25.1527, 25.1529, 25.1531, 25.1533, 25.1535*, 25.1549(a)(b)(c), 25.1553, 25.1581, 25.1583, 25.1585, 25.1587, 25.1591, 25.1701(a)*, 25.1703(a)(b)(d)*, 25.1705*, 25.1707*, 25.1709*, 25.1711*, 25.1713*, 25.1715*, 25.1717*, 25.1719*, 25.1723*, 25.1725*, 25.1727*, 25.1731*

- * For new and modified parts only (engine, pylon, nacelle, bleed air system, wing structural changes in area of pylon and landing gear reinforcement)
- ** FAA acceptance of this exception is for the Fuel Quanty Indicating System (FQIS) and Fuel Level Sensor System (FLSS) wiring installation changes and fuel tank structural fastener changes only and is based on the following design features incorporated on the NEO: The FQIS/FLSS wiring is within the S-routes in pressurized areas and is isolated with protective textile sleeving with CAUTION, FUEL TANK HARNESS ONLY" labels. The FQIS/FLSS wiring is within the S-routes in non-pressurized areas and is isolated with protective heat shrink sleeving and routed with the rest of the S-route bundle in PTFE conduit up to fuel tank walls penetration with "CAUTION, FUEL TANK HARNESS INSIDE" labels. Wiring production breaks from Avionic bays to the the tank walls is done through dedicated connectors. The fuel tank structural fastener changes meet the criteria for the use of exceptions in FAA policy ANM-112-08-002 "Policy on Issuance of Special Conditions and Exemptions Related to Lightning Protection of Fuel Tank Structure," dated May 26, 2009.

Plus the following sections of 14 CFR part 25 amended as indicated below applied to the components and areas affected by the change per Airbus reversion justification:

25.21 Amdt. 120 ¹	25.561(a)(b)(c)(d) Amdt. 64 ²
25.103 Amdt. 120 ¹	25.571(a)(b)(e)(1) Amdt. 86 ³
25.105 Amdt. 120 ¹	25.611 Amdt. 56 ⁴
25.107 (except (e)(1)(iv)) Amdt 120 ¹	25.677(b) Amdt. 56 ⁵
25.111 Amdt. 120 ¹	25.899 Amdt. 56 ⁶
25.119 Amdt. 120 ¹	25.1317 Amdt. 56 ⁷
25.121 Amdt. 120 ¹	25.1322 Amdt. 56 ⁸
25.123 Amdt. 120 ¹	25.1329 Amdt. 56 ⁹

25.125 Amdt. 120 ¹	25.1351 Amdt. 56 ¹⁰
25.143 Amdt. 120 ¹	25.1419 Amdt. 120 ¹
25.145 Amdt. 97 ¹	25.1435 Amdt. 56 ¹¹
25.207 Amdt. 120 ¹	25.1459(a) Amdt. 56 ¹²
25.237 Amdt. 120 ¹	Appendix H at amdt 56 ¹³
25.253(c) Amdt. 120 ¹	

Notes:

- 1. FAA acceptance of these reversions was based on the fact that Airbus has done additional testing above the requirements incorporated by reference as documented in the summary of EASA CRI B-06, issue 2, dated April 11, 2013, Flight in Icing Conditions, and a determination that compliance with the amendment in effect on the date of application for these rules (i.e., Amendment 25-121) would not materially increase the level of safety exception, or in some cases, would be impractical in accordance with 14 CFR 21.101(b)(3). EASA CRI B-06 is incorporated as part of certification basis for this airplane.
- 2. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-91) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 3. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-132) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 4. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 5. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-115) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 6. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 7. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-122) would not materially increase the level of safety above Special Condition 25-ANM-23 in accordance with 14 CFR 21.101(b)(3).
- 8. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-131) would be impractical in accordance with 14 CFR 21.101(b)(3).
- 9. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-119) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 10. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-72) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 11. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-104) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 12. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-124) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).

13. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).

Plus the following sections of 14 CFR part 25 amended as indicated below per Airbus elect to comply:

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25.853(a)(1) at Amendment 25-66
25.853(c) at Amendment 25-59
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Special conditions:

FAA Special Condition 25-ANM-23 applicable to each model as defined in FAA TCDS A28NM remains applicable, except:

Paragraph 2 – Active Controls is replaced with the following special conditions:

- No. 25-469-SC Effective October 11, 2012 "Interaction of Systems and Structures"
- No. 25-470-SC Effective October 11, 2012 "Design Dive Speed"
- No. 25-471-SC Effective October 11, 2010- "Design Roll Maneuver Conditions"

Paragraph 4 – Protection from Lightning and Unwanted Effects of Radio Frequency is replaced with the following later requirements:

- 25.1316 thru amendment 25-136
- 25.1317 thru amendment 25-136

In addition the following FAA Special Condition applies specifically to the Airbus SA NEO program:

• Non. 25-582-SC Effective April 30, 2015 - "Transient Engine Failure Loads"

Equivalent Safety Findings (ESFs):

The ESFs applicable to each model as defined in FAA TCDS A28NM remain applicable plus the following ESFs applied specifically to the Airbus SA NEO program:

ELOS Memo	Regulation	<u>Subject</u>
AT00949IB-T-P-10	25.779(b)(1)	Throttle Motion During Reduced (Flexible) Takeoff Thrust Operations and/or Go-Around
AT00949IB-T-P-11	25.1549(a), (b) and (c)	Digital Display of High Pressure Rotor Speed (N2)
AT00949IB-T-P-12	25.1549(a)	Oil Temperature Indication
AT00949IB-T-P-1	25.997(d) & 25.1305(c)(6)	Fuel Filter Bypass Indication
AT00949IB-T-P-14	25.1193(e)(3)	Resistance to Fire of Cowling
AT00949IB-T-P-15	25.1181(a)(6) & (b), & 25.1195 thru 25.1203	Fan Zone Non-fire Zone (PW only)
AT00949IB-T-P-17	25.933(a)(1)(ii)	Flight Critical Thrust Reverser
AT00949IB-T-P-19	25.934	Thrust Reverser Testing
AT00949IB-T-P-21	25.1181(a)(6) & (b), 25.1182 and 25.1195 through 25.1203	PW1100G-JM 2.5 Bleed & Track lock Areas and PW1100G-JM and LEAP-1A Areas Adjacent to Designated Fire Zones
AT00949IB-T-SA-1	25.1301 and 25.1309	Equipment, Systems, and Installation Requirements: Use of ARAC Recommendations

Exemptions:

The Exemptions applicable to each model as defined in TCDS A28NM remain applicable plus the following exemption applied specifically to the Airbus SA NEO models:

Exemption No. 13048 for 25.841(a) dated September 25, 2015 (13048A dated February 22, 2018, 13048B dated March 6, 2019.)

Optional Requirements elected

- § 25.801 for ditching.
- § 25.1419 for icing.
- § 25.1535 for ETOPS

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Noise standards

14 CFR part 36 Stage 4 as amended by Amendment 36-1 through Amendment 36-30.

14 CFR part 36 Amendments 36-1 through Amendment 36-31, for Stage 5, for the following models:

A319-111, A319-112, A391-131, A319-132, and A319-133. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.

Fuel venting and exhaust emissions standards

14 CFR part 34 as amended by Amendment 34-1 through 34-5.

Part 26

14 CFR part 26 as amended by Amendment 26-1 through 26-5.

Additional Design Requirements and Conditions

Compliance with the established basis for type certification notwithstanding, § 21.21(b)(2) precludes issuance of a type certificate if there is any feature or characteristic that would make the product unsafe. The following design details or information must be maintained to ensure that an unsafe design condition is not present:

In-flight Engine Restart

- 1. A minimum restart capability after an all engines out scenario must be established under the following conditions using procedures provided in the airplane flight manual (AFM):
 - a) During the take-off and the initial climb-out portion of the flight, the airplane should have the capability for the flightcrew to restore engine power when the fuel source to the engine is interrupted.
 - b) During the high altitude portion of the flight at cruise speed and maximum altitude, the airplane should have the capability for the flightcrew to restart from a stabilized windmill speed those engines required to maintain level flight or should have the capability for the flightcrew to restart all but one of the engines and produce maximum continuous thrust or power by an altitude of 15,000 feet.
 - c) During flight at speeds greater than the minimum flaps-up "holding speed" and at altitudes below 20,000 feet, the airplane should have the capability for the flightcrew to restart with the engines at stabilized windmill speed those engines necessary to maintain safe flight and arrest the airplane descent within a total altitude loss of 5,000 feet prior to exceeding an airspeed of 300 knots.

Note 1:

The A319 basic type design definition for U.S. import certification is contained in the following documents:

- -AI/EA-S 413.0969/96 for A319-111 model
- -AI/EA-S 413.1012/96 for A319-112 model
- -AI/EA-S 413.3100/96 (Mod 25699 supplement) for A319-112 model
- -AI/EA-S 413.2504/96 for A319-113 model
- -AI/EA-S 413.2505/96 for A319-114 model
- -AI/EA-S 413.2127/99 for A319-115 model
- -AI/EA-S 413.0393/97 for A319-131 model
- -AI/EA-S 413.0396/97 for A319-132 model
- -AI/EA-S 413.2128/99 for A319-133 model
- 00J000A5074/C20 iss 01 for A319-151N model
- 00J000A5242/C00 iss 01 for A319-153N model
- 00J000A5071/C20 iss 01 for A319-171N model

Note 2:

For models A319-111, A319-112, A319-113 and A319-114, modification 26799 (FM without ACARS) or 26968 (FM with ACARS) is the minimum standard to be qualified for Cat IIIB precision approach.

For models A319-131 and A319-132, modification 26716 (FM without ACARS) or 26717 (FM with ACARS) is the minimum standard to be qualified for Cat IIIB precision approach.

A319-115 &A319-133 are basically qualified for Cat IIIB precision approach.

This does not constitute operational approval.

Note 3:

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Modification 25303 (thrust reverser third line of defense for CFM 56 engine) or 25302 (thrust reverser third line of defense for IAE engine) are part of the FAA Type Design and shall be implemented on any A319 aircraft entered on the U.S. register, before the individual U.S. standard Certificate of Airworthiness can be issued.

Note 4:

If modification 25800 is embodied on models with CFM56-5B engines, the engine performance is improved. The engine denomination changes to /P.

CFM56-5B/"non-P" engine can be intermixed with CFM56-5B/P engine on the same aircraft.

Note 5:

The type design definitions and certification standard equipment lists as referenced in Note 1 are complemented by document 00D000A0546/C0S "A319-100/A321-200 FMGC Type Standard Evolution" and document 00J000A0067/C0S "A319-111/112 ATC Transponder Type Standard Evolution".

Note 6:

A319 for Corporate Jet use are defined through the following set of modifications:

- Modification 28238 (0 to 6 ACTs)
- Modification 28162 (extension of flight envelope up to 41,000 ft)
- Modification 28342 (modification of CG limits)

Note 7:

On A319 for Corporate Jet use, the certification of installing up to six Additional Center Tanks (ACT) in bulk version is defined by modification 28238. The approval together with structural and system provisions was subject of compliance demonstrated to Advisory Circular AC 25-8.

Note 8

On A319 for Corporate Jet use, exemptions to the following paragraphs of the FAR have been granted when the airplane is not operated for hire or for public transport

(Granted APR 9, 2001, Exemption No. 7489):

25.785(h)(2) Flight Attendant seat locations which do not provide for direct view of the cabin

25.807(d)(7) Distance between exits

25.813(e) Installation of Interior Doors in between passenger compartments

Note 9:

If modification 26610 is embodied on A319 airplanes, the engine performance and gaseous emission levels are improved. The engine denomination changes to /2P (DAC IIC Dual Annual Combustor).

- CFM56-5B6/P engine can be intermixed with CFM56-5B6/2P (DAC IIC Dual Annual Combustor) engine on the same aircraft (AFM Supplement).
- CFM 56-5B/2 "non P" (DAC) engine can be intermixed with CFM 56-5B/2P (DAC II C) engine on the same aircraft (AFM supplement).
- CFM 56-5B/P or / "non P" (SAC) engine can be intermixed with CFM 56-5B/2P (DAC II C) engine on the same aircraft (AFM supplement).

Note 10:

If modification 23755 is embodied on A319 airplanes, the maximum permissible gas temperature for take-off and max. continuous operation is extended to 915° C and 880° C, respectively. However, the ECAM indication remains at 890° C and 855° C, respectively. The engine denomination changes to /F.

On A319-113, CFM 56-5A4 engines can be intermixed with CFM 56-5A4/F engine on the same aircraft.

On A319-114, CFM 56-5A5 engines can be intermixed with CFM 56-5A5/F engine on the same aircraft.

Note 11:

If modification 32208 is embodied in production on A319 airplanes, the aircraft is eligible for maximum capacity of 160 passengers. This modification consists in structural and system provision for the installation of second pair of overwing emergency exits.

Note 12:

If modification 37147 (Tech insertion program) is embodied in production or 38770 (Tech insertion program retofit) is embodied in service on A319 airplanes, the engine performance and gaseous emission levels are improved. The engine denomination changes to /3

Note 13:

If modification 37868 (Select One Package) is embodied in production or if modification 38554 (Select One Package for retrofit) is embodied on in-service A319 airplanes, the engine performance and gaseous emission levels are improved. The engine denomination itself does not change.

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Note 14:

If modification 38573 is embodied in service on A319 airplanes, engine hardware configurations can be intermixed with one CFM56-5Bx/3 SAC (Tech Insertion) and one CFM56-5Bx/P SAC engines.

Note 15:

If modification 34119 is embodied in production on A319 airplanes, CFM56-5B SAC (Single Annular Combustor) and CFM56-5B DAC (Double Annular Combustor) engines can be intermixed on the same aircraft.

Note 16:

Further to "D/E/J Noise" Project approval, from November, 05th, 2009, all A319 airplane/engine configurations are eligible to be in compliance with ICAO Annex 16, Chapter 4 and FAR Part 36, Stage 4 (including Amdt 36-28).

Note 17:

From March 31, 2008, there is no longer any CFM56-5B5 non /P in field or in production.

From March 31, 2008, there is no longer any CFM56-5B6 non /P in field or in production.

From March 31, 2008, there is no longer any CFM56-5B7 non /P in field or in production.

Note 18:

For aircraft models A319-115, A319-132 and A319-133, the Type III emergency exit hatchs can be de-activated by embodiment of modification 152777. In this case, the maximum number of occupants in the passenger cabin is limited to zero during taxi, take-off, flight and landing, unless terms and conditions to occupy specific cabin areas have been approved by operator's competent airworthiness authority

Note 19:

On series A319-100 airplanes equipped with CFM56 engines, introduction of standard of wingbox without dry bay (modification 37331) increases the wing fuel capacity by 350 liters.

Note 20:

If Modification 160001 for installation of structural provisions for new large wingtip device (Sharklet) is embodied on A319 series airplanes the usable fuel quantities are reduced as shown above to account for the loss of volume due to structural reinforcements in the wing and center wing box.

Note 21:

If Modification 160500 for installation of new large wingtip devices (Sharklet) is embodied on A319 series airplanes the eco efficiency and payload-range performance is improved. MOD 160500 is approved for weight variants 000 through 005 on the A319-111,-112,-113,-114,-115,-131,-132,-133. If modification 160080 for retrofit installation of new large wingtip devices (Sharklet) is embodied on in-service A319 series airplanes the eco efficiency and payload-range performance is improved. Modification 160080 is approved for MSN 1200 and above only without Airbus Modification 160001 reinforced center wingbox, and for WV 000 to 005 only. The certification basis for Modification 160500 and 160080 is shown above.

Note 22:

If Modification 157777 (MAX PAX) is installed on Models A319-111, -112, -113, -114, -115, -131, -132 and -133 with Wing Tip Fence (WTF), the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 150 passengers.

Note 23:

Limitations associated with installation of MAX PAX Modification 159115 are referenced in ELOS Memo AT10769IB-T-CS-6 dated May 16, 2017.

Note 24:

If Modification 159535 (MAX PAX) is installed on Models A319-111, -112, -113, -114, -115, -131, -132 and -133 with Wing Tip Fence (WTF), the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 160 passengers.

Note 25:

For A319-111,-112,-113,-114,-115,-131,-132,-133 models, the embodiment of modification 155789 leads to change the maintenance program and its associated Maintenance Programme Publication Trigger from 48,000FC/60,000FH to 60,000FC/120,000FH (whichever occurs first).

Note 26:

If modification 167900 is installed on A319-111, -112, -113, -114, -115, -131, -132, and -133 models, the forward over-wing emergency exits are deactivated. The maximum number of occupants in the cabin is then limited to 0 (zero) unless a separate approved modification is embodied to remove the limitation.

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III. Type A320-200 Series Transport Category Airplanes *

Model A320-211, Approved December 15, 1988;

Model A320-231, Approved July 6, 1989;

Model A320-212, Approved November 26, 1990;

Model A320-232, Approved November 12, 1993;

Model A320-233, Approved November 17, 1995;

Model A320-214, Approved December 12, 1996.

Model A320-271N, Approved November 24, 2015

Model A320-251N, Approved May 31, 2016

Model A320-216, Approved December 19, 2016

Model A320-252N. Approved February 21, 2018

Model A320-272N. Approved April 4, 2019

Model A320-253N, Approved May 9, 2019

Model A320-273N, Approved May 9, 2019

Engines:

Model A320-211, Two CFMI Model CFM56-5A1 or CFM56-5A1/F jet engines;

Model A320-212, Two CFMI Model CFM56-5A3 jet engines;

Model A320-214, Two CFMI Model CFM56-5B4 or CFM56-5B4/P or CFM56-5B4/2P or CFM56-5B4/P1 or CFM56-5B4/2P1

or CFM56-5B4/3 or CFM56-5B4/3B1 or jet engines;

Model A320-231, Two IAE Model V2500-A1 jet engines;

Model A320-232, Two IAE Model V2527-A5 jet engines;

Model A320-233, Two IAE Model V2527E-A5 jet engines;

Model A320-271N, Two IAE Model PW1127G-JM or PW1127GA-JM jet engines;

Model A320-251N, Two CFMI Model LEAP-1A26 jet engines

Model A320-216, Two CFMI CFM 56-5B6/P or CFM56-5B6/3 jet engines

Model A320-252N, Two CFMI Model LEAP-1A24 jet engines

Model A320-272N, Two IAE Model PW1124G1-JM jet engines

Model A320-253N, Two CFMI Model LEAP-1A29 jet engines

Model A320-273N, Two IAE Model PW1129G-JM jet engines

See Note 4 for description of "/P" engine models

See Note 5 for description of "/2P" engine models

See Note 7 for desription of "/F" engine models

See Note 11 for description of "/3" engine models

See Note 12 for description of " "engine models (Select One Package)

See Note 19 for description of "/P1" or "/2P1" or "/3B1" engine models

Fuel:

See Installation Manual - Documents CFM 2026 or CFM 2129 or Service Bulletin 73-0001 or IAE-0043 or Service Bulletin PW1000G-1000-73-00-0002 00A930AD

A320-211/-212/-214/-216/-231/-232/-233

TYPE	SPECIFICATION (NAME)					
	FRANCE		US	SA	ī	JK
Kerosene	DCSEA 134-D	(F-34)	ASTM D 1655	(JET A) (JET A1)	DEF STAN 91/91	(AVTUR) (JET A1)
			MIL-DTL- 83133-H	(JP 8)	DEF STAN 91/87 iss 7	(AVTUR/FSH) (JET A1) (AIA)
Wide cut			ASTM D 6615	(JET B)	DEF STAN 91/88	(AVTAG/FSH)
			MIL-DTL-5624	(JP 4)		
High flash point	DCSEA 144-C	(F-44)	MIL-DTL- 5624-V	(JP 5)	DEF STAN 91/86 iss 7	(AVCAT)

A320-251N/-252N/-253N/-271N/-272N/-273N

TYPE	SPECIFICATION (NAME)				
	USA		Ţ	JK	
Kerosene	ASTM D 1655	(JET A) (JET A1)	DEF STAN 91/91	(AVTUR) (JET A1)	
	MIL-DTL- 83133-H	(JP 8)	DEF STAN 91/87 iss 7	(AVTUR/FSII) (JET A1) (AIA)	
High flash point	MIL-DTL-5624- V	(JP 5)	DEF STAN 91/86 iss 7	(AVCAT)	

Additives: See CFMI "Specific Operating Instructions," CMF TPOI-13 or Service Bulletin 73-0001 or IAE V2500 "Installation and Operating Manual" IAE-0043, 4.5 or the "Standard Practices and Processes Manual" in IETM or Service Bulletin PW1000G-1000-73-00-0002-00A-930A-D. The above mentioned fuels and additives are also suitable for the APU.

Engine Limits:

	CFMI	CFMI	CFMI	CFMI	CFMI CFM56	IAE V2500-
	CFM56-5A1	CFM56-	CFM56-5A3	CFM56-	-5B6/P *** or	A1
		5A1/F		5B4*** or -	-5B6/3	
				5B4/P or		
				5B4/2P or -		
				5B4/P1 or		
				5B4/2P1 or -		
				5B4/3 or		
				5B4/3B1		
Engine	Data Sheets	Data Sheets	Data Sheets	Data Sheets	FAA Data	Data Sheets
Limitation					Sheets	
	E28NE (FAA)	E28NE (FAA)	E28NE (FAA)	E37NE (FAA)	E37NE	E31NE (FAA)
				E38NE (FAA)	E38NE	
Static Thrust at						
Sea Level						
- Take-off (5	11 120 daN	11 120 daN	11 787 daN	12 010 daN	10 453 daN	11 030 daN
min)** (Flat rated	(25,000 lb)	(25,000 lb)	(26,500 lb)	(27,000 lb)	(23,500 lb)	(24,800 lb)
30°C)						
- Maximum	10 542 daN	10 542 daN	10 542 daN	10 840daN	9 008 daN	9 890 daN
Continuous	(23,600 lb)	(23,600 lb)	(23,600 lb)	(24,370 lb)	(20,250 1b)	(22,240lb)
(Flat rated 25°C)						
Maximum Engine						
Speed						
- N1 rpm (%)	5,100 (102)	5,100 (102)	5,100 (102)	5,200 (104)	5,200 (104)	5,465 (100)
- N2 rpm (%)	15,183(105)	15,183(105)	15,183(105)	15,183(105)	15,183 (105)	14,915(100)
		Eng. limit/	Eng. limit/			
Max Gas		ECAM	ECAM			
Temp.(°C)						
- Take-off (5	890	915/890	915/890	950	950	635
min)**						
- Max Continuous	855	880/855	880/855	915	915	610
- Starting*	725	725/725	725/725	725	725	635
Maximum Oil						
Temp.						
(Supply Pump						
Inlet; °C)						
-Takeoff,	140	140	140	140	140	155
Stabilized						
-Transient	155	155	155	155	155	165
(15 min max)						
Min. Press. (PSI)	13	13	13	13	13	60
Approved oils	See SB	See doc IAE				
	CFMI 79-001-	0043 (MIL-L				
* 41	0X	0X	0X	0X	0X	23699)

^{* 4} consecutive cycles of 2 minutes each.

- ** 10 minute at take-off thrust allowed in case of engine failure (at take-off and during go-around)
 *** See Note 17 for engine models no longer in production/service

Engine Limits Continued:

Engine Limits Contin	IAE V2527-A5	PW1127G-JM or	PW1124G1-JM	CFMI LEAP-	CFMI LEAP-
	or V2527E-A5	PW1127GA-JM		1A26	1A24
Engine Limitation	Data Sheet E40NE (FAA)	Data Sheet E87EN (FAA)	Data Sheet E87EN (FAA)	Data Sheet E000089EN (FAA)	Data Sheet E000089EN (FAA)
Static Thrust at					
Sea Level					
- Take-off (5	11 030 daN	12 043 daN	10 782 daN	12 064 daN	10 680 daN
min)** (Flat rated 30°C)	(24,800 lb)	(27,075lb)	(24,240lb)	(27,120lb)	(24, 010lb)
- Maximum	9 890 daN	11 718 daN	10 691 daN	11 868 daN	10 676daN
Continuous	(22,240lb)	(26,345lb)	(24,035lb)	(26,680lb)	(24, 000lb)
(Flat rated 25°C) Maximum Engine					
Speed					
- N1 rpm (%)	5,650 (100)	10,047(105)	10,047(105)	3,894(101)	3,894(101)
- N2 rpm (%)	14,950(100)	22300(105)	22300(105)	19,391(116.5)	19,391(116.5)
	Eng. limit/				
Max Gas Temp.(°C)	ECAM				
- Take-off (5	645/635	1083	1083	1060	1060
min)**					
- Max Continuous	610/610	1043	1043	1025	1025
- Starting* Maximum Oil	635/635	1083	1083	875	875
Temp.					
(Supply Pump					
Inlet; °C)					
-Takeoff,	155	152	152	140	140
Stabilized	4.5				
-Transient (15 min max)	165	141	141	155	155
Min. Press. (PSI)	60	63	63	29 redline/17.4	29 redline/17.4
11000. (1 01)				idle	idle
Approved oils	See doc IAE	See SB	See SB	See SB 79-0001	See SB 79-0001
	0043 (MIL-L	PW1000G-1000-	PW1000G-1000-		
	23699)	79-00-0002-00A-	79-00-0002-00A-		
	off thrust allowed in	930A-D	930A-D		

^{** 10} minute at take-off thrust allowed in case of engine failure (at take-off and during go-around)

Engine Limits Continued:

Eligine Ellints Continued.				
Engine Limitation	PW1129G-JM	CFMI LEAP-1A29		
	Data Sheet E00087NE (FAA)	Data Sheet E000089EN (FAA)		
Static Thrust at				
Sea Level				
- Take-off (5	13,000 daN (29,245	13,029 daN		
min)** (Flat rated	lbs)	(29,290 lbs)		
30°C)				
- Maximum	11,719 daN	11,868 daN		
Continuous	(26,345 lbs)	(26,680 lbs)		
(Flat rated 25°C)				

PW1129G-JM	CFMI LEAP-1A29
Data Sheet E00087NE (FAA)	Data Sheet E000089EN (FAA)
10,047(105)	3,894
22,300(105)	19,391
Eng. limit/	
1083	1060
1043	1025
1083	875
152	140
141	155
63	29 redline/17.4 idle
See SB	See SB 79-0001
PW1000G-1000-79- 00-0002-00A-930A-	
	Data Sheet E00087NE (FAA) 10,047(105) 22,300(105) Eng. limit/ 1083 1043 1083 152 141 63 See SB PW1000G-1000-79-

^{** 10} minute at take-off thrust allowed in case of engine failure (at take-off and during go-around)

<u>Airspeed Limits (Indicated Airspeed - IAS - Unless otherwise Stated:</u>

Maximum Operating Mach
 Maximum Operating Speed
 VMO: 350 kt

- Maneuvering Speed VA:

- See Limitations Section of Aircraft Flight Manual

- Extended Flaps/Slats Speed - VFE

Configuration	Slats/Flaps	VFE (Kt)	
1	18/0	230	Intermediate
			Approach
	*18/10	215	Take-off
2	22/15	200	Take-off and
			Approach
3	22/20	185	Take-off,
			Approach, and
			Landing
Full	**27/35	177	Landing

^{*} Auto flap retraction at 210 kt in Take-off configuration.

Landing Gear:

- VLE - Extended 280 Kt/Mach 0.67

- VLO - Extension 250 kt - Retraction 220 kt

Tire Limit Speed (Ground Speed) = 195.5 kt (225 mph)

^{**27/40} for A320 equipped with IAE engines or CFMI LEAP-1A engines

Maximum Weights:

FAA	000	001	003	007	008	009	010	011	012
Approved	BASIC	Mod							
Weight		20966	22269	23264	23900	23900	23900	30307	30479
Variants						Mod	Mod		
						22269	23264		
A320-211	YES								
A320-212	YES	NO	YES						
A320-214	YES	NO	YES						
A320-216	YES	YES	YES	NO	YES	YES	YES	YES	NO
A320-231	YES								
A320-232	YES	NO	YES						
A320-233	YES	NO	YES						

FAA	013	014	015	016	017	018	019
Approved	Mod	Mod	Mod	Mod	Mod	Mod	Mod
Weight	31132	31385	34047	34094	151634	151710	156523
Variants							
A320-211	YES	YES	NO	YES	NO	YES	YES
A320-212	YES	YES	NO	YES	NO	YES	YES
A320-214	YES	YES	YES	YES	YES	YES	YES
A320-216	YES	YES	NO	YES	NO	YES	YES
A320-231	YES	YES	NO	YES	NO	YES	YES
A320-232	YES	YES	YES	YES	YES	YES	YES
A320-233	YES	YES	YES	YES	YES	YES	YES

A320-251N/-252N/-253N/-271N/-272N/-273N

FAA	050	051	052	053	054	055	056	057	068
ApprovedW	BASIC	Mod							
eight	Mod	161380	161379	161384	161381	161249	161383	161382	157907
Variants	161248								
A320-251N	YES								
A320-271N	YES								
A320-272N	YES								
A320-252N	YES	NO							
A320-253N	YES	NO							
A320-273N	YES	NO							

FAA	069	071	075	078	082	083	085
Approved	Mod						
Weight	157908	157910	157914	157917	157921	157922	157924
Variants							
A320-251N	YES						
A320-271N	YES						
A320-272N	YES	YES	NO	YES	YES	YES	YES
A320-252N	YES	YES	YES	NO	NO	YES	YES
A320-273N	YES	YES	NO	NO	NO	YES	YES
A320-253N	YES	YES	NO	NO	NO	YES	YES

<u>A320-211/-212/-214/-216/-231/-232/-233:</u>

VARIANT	000	001	003	007	008	009	010
	BASIC						
	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)
	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)
Max. Take-off Weight	73 500	68 000	75 500	77 000	73 500	75 500	77000
	162 068	149 940	166 478	169 785	162 068	166 478	169785
Max. Landing Weight	64 500	64 500	64 500	64 500	64 500	64 500	64500
	142 223	142 223	142 223	142 223	142 223	142 223	142223

VARIANT	000	001	003	007	008	009	010
	BASIC						
	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)
	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)
Max. Zero Fuel	60 500	60 500	60 500	60 500	61 000	61 000	61000
Weight	133 403	133 403	133 403	133 403	134 505	134 505	134505

VARIANT	011	012	013	014	015	016	017
	(KG)						
	(LBS)						
Max. Take-off Weight	75 500	77 000	71 500	73 500	78 000	73 500	78 000
	166 478	169 785	157 631	162 068	171 958	162 068	171 958
Max. Landing Weight	66 000	66 000	64 500	64 500	64 500	66 000	66 000
	145 505	145 505	142 223	142 223	142 223	145 505	145 505
Max. Zero Fuel	62 500	62 500	61 000	61 500	61 000	62 500	62 500
Weight	137 789	137 789	134 505	135 584	134 505	137 789	137 789

Maximum Weights Continued:

VARIANT	018	019
	(KG)	(KG)
	(LBS)	(LBS)
Max. Take-off Weight	71 500	70 000
	157 631	154 327
Max. Landing Weight	66 000	64 500
	145 505	142 223
Max. Zero Fuel	62 500	61 000
Weight	137 789	134 505

<u>A320-251N/-252N/-253N/-271N/-272N/-273N:</u>

VARIANT	050	051	052	053	054	055	056
	(KG)						
	(LBS)						
Max. Take-off Weight	73 500	73 500	77 000	77 000	79 000	79 000	70 000
	162 068	162 068	169 785	169 785	174 163	174 163	154 322
Max. Landing Weight	66300	67 400	66 300	67 400	66 300	67 400	66 300
	146 164	148 590	146 164	148 590	146 164	148 590	146 164
Max. Zero Fuel	62800	64 300	62 800	64 300	62 800	64 300	62 800
Weight	138 449	141 756	138 449	141 756	138 449	141 756	138 449

VARIANT	057	068	069	071	075	078	082
	(KG)						
	(LBS)						
Max. Take-off Weight	70 000	75 500	75 500	75 000	74 000	72 500	71 500
	154 322	166 478	166 478	165 346	163 159	159 835	157 630
Max. Landing Weight	67 400	66 300	67 400	67 400	67 400	66 300	66 300
	148 590	146 164	148 590	148 590	148 590	146 164	146 164
Max. Zero Fuel	64 300	62 800	64 300	64 300	64 300	62 800	62 800
Weight	141 756	138 449	141 756	141 756	141 756	138 449	138 449

VARIANT	083	085
	(KG)	(KG)
	(LBS)	(LBS)
Max. Take-off Weight	71 500	71 000
	157 631	156 528
Max. Landing Weight	67 400	67 400
	148 590	148 590
Max. Zero Fuel	64 300	64 300
Weight	141 756	141 756

Minimum Weight:

A320-200:

VARIANT	A320-211/212/214/232/233		A320-271N/-	-272N/-273N	A320-251N/252/-253N		
	(KG)	(LBS)	(KG)	(LBS)	(KG)	(LBS)	
Minimum Weight	37 230	82 080	40 300	88 847	40 600	89 508	

Minimum Crew:

2 Pilots

Maximum Passengers:

179

See Notes 15, 20, 27, 28, 30 and 32

Maximum Baggage:

CARGO COMPARTMENT	MAXIMUM LOAD		
	(KG) (LBS)		
Forward	3 402 7 500		
Aft	4 536 10 000		
Rear (Bulk)	1 497 3 300		

For the positions and the loading conditions authorized in each position (references of containers, pallets, and associated weights), see Weight and Balance Manual, ref. 00D080A0001/C1S Chapter 1.10.

Fuel Capacity (0.8 kg/liter):

A320-211/-212/-214/-216/-231/-232/-233:

A320-211/-212/-214/-210/-231/-232/-233.								
	3-Tank Airplane				4-Tank Airplane (*)			
	Usable Fuel Unusable Fuel			Usable Fuel Unusable Fuel				
	Liters (kgs)	Gallons (lbs)	Liters (kgs)	Gallons (lbs)	Liters (kgs)	Gallons (lbs)	Liters (kgs)	Gallons (lbs)
Wing	15 609 (12 487)	4 123 (27 529)	58.9 (47.1)	15.6 (103.9)	15 609 (12 487)	4 123 (27 529)	58.9 (47.1)	15.6 (103.9)
Center	8 250 (6 600)	2 179 (14 550)	23.2 (18.6)	6.1 (41.0)	8 250 (6 600)	2 179 (14 550)	23.2 (18.6)	6.1 (41.0)
ACT (*)					2 992 (2 393)	790 (5276)	17.0 (13.6)	4.4 (29.9)
Total	23 859 (19 087)	6 302 (42 079)	82.1 (65.7)	21.7 (144.9)	26 851 (21 480)	7 092 (47 355)	99.1 (79.3)	26.1 (174.7)

^(*) see note 8

		4 to 5-Tank Airplane	` /		
Tank	Usab	(low pressure ACT sy le Fuel	Unusable Fuel		
1 44111	Liters (kgs) Gallons (lbs)		Liters (Kgs)	Gallons (lbs)	
TOTAL	23 859	6 302	82.1	21.7	
3-Tank	(19 087)	(42 079)	(65.7)	(144.9)	
Airplane					
_	2 992	790	17	4.5	
ACT 1	(2 393)	(5 274)	(13.6)	(30.0)	
TOTAL	26 851	7 092	99.1	26.2	
4-Tank	(21 480)	(47 346)	(79.3)	(174.9)	
Airplane	, ,	, , ,	, ,		
	2 992	790	17	4.5	
ACT 2	(2 393)	(5 274)	(13.6)	(30.0)	
TOTAL	29 843	7 882	116.1	30.7	
5-Tank	(23 874)	(52 620)	(92.9)	(204.9)	
Airplane				• •	

(**) see note 26

A320-211/-212/-214/-216/-231/-232/-233 with Modification 160001 (Structural Provisions for Sharklet - see note 22):

	3-Tank Airplane				4-Tank Airplane (*)			
	Usable Fuel		Unusable Fuel		Usable Fuel		Unusable Fuel	
	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons
	(kgs)	(lbs)	(kgs)	(lbs)	(kgs)	(lbs)	(kgs)	(lbs)
Wing	15 569	4 113	58.9	15.6	15 569	4 113	58.9	15.6
	(12 445)	(27 436)	(47.1)	(103.9)	(12 445)	(27 436)	(47.1)	(103.9)
Center	8 248	2 179	23.2	6.1	8 248	2 179	23.2	6.1
	(6 598)	(14 546)	(18.6)	(41.0)	(6 598)	(14 546)	(18.6)	(41.0)
ACT (*)					2 992	790	17.0	4.4
					(2 393)	(5 276)	(13.6)	(29.9)
Total	23 817	6 292	82.1	21.7	26 809	7082	99.1	26.1
	(19 043)	(41 982)	(65.7)	(144.9)	(21 447)	(47 258)	(79.3)	(174.7)

^(*) see note 8

Fuel Capacity Continued (0.8 kg/liter):

		4 to 5-Tank Airplane (low pressure ACT sys	. ,		
Tank	Usabl	le Fuel	Unusable Fuel		
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)	
TOTAL	23 816	6 292	82.1	21.7	
3-Tank	(19 052)	(42 005)	(65.7)	(144.9)	
Airplane			, ,	, ,	
-	2 992	790	17	4.5	
ACT 1	(2 393)	(5 274)	(13.6)	(30.0)	
TOTAL	26 808	7 082	99.1	26.2	
4-Tank	(21 425)	(47 279)	(79.3)	(174.9)	
Airplane					
	2 992	790	17	4.5	
ACT 2	(2 393)	(5 274)	(13.6)	(30.0)	
TOTAL	29 800	7 872	116.1	30.7	
5-Tank	(23 839)	(52 553)	(92.9)	(204.9)	
Airplane					

^(**) see note 26

A320-251N/-252N/-253N/-271N/-272N/-273N

		3-Tank Airplane					
	Usabl	e Fuel	Unusable Fuel				
	Liters	Liters Gallons		Gallons			
	(kgs)	(lbs)	(kgs)	(lbs)			
Wing	15 477	4 088	58.9	15.5			
	(12 428)	(27 399)	(47.3)	(104.3)			
Center	8 248	2 179	23.2	6.1			
	(6 623)	(14 601)	(18.6)	(41.0)			
Total	23 725	6 267	82.1	21.6			
	(19 051)	(42 000)	(65.9)	(145.3)			

Oil Capacity

CFMI CFM56-5A/5B - Engine Oil Capacity, 10 quarts/engine (9.46 liters). IAE V2500-A5 - Engine Oil Capacity, 7 quarts/engine (6.6 liters) IAE PW1100G-JM - Engine Oil Capacity 34.9 quarts/engine (33.0 liters) CFMI LEAP-1A - Engine Oil Capacity 21,3 quarts/engine (20,1 liters)

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Maximum Operating Altitude:

- 39,800 feet (12,200 m) clean if modification 30748 is embodied.
- 39,100 feet (12,000 m) clean.
- 20,000 feet (6,500 m) Slats/Flaps extended.

Equipment:

The basic equipment as prescribed in the airworthiness regulations (see certification basis) must be installed in the aircraft for certification.

Equipment approved for installation are listed in the definition of the reference model and the modification applicable to it. Refer to Type Certification Standard Equipment List 00D000A0101/C1S.

Refer to Note 1 for list of A320 airplane model FAA Type Definitions.

Serial Numbers Eligible:

Until September 26, 2004, A320 aircraft, all series, all models, have been produced in Blagnac (France) under approval P09 or F.G.035 issued by DGAC to Airbus.

From September 27, 2004 until April 14, 2008, A320 aircraft, all series, all models, have been produced in Blagnac (France) under approval FR.21G.0035 issued by DGAC to Airbus.

From April 15, 2008 until July 20, 2008, A320 aircraft, all series, all models, have been produced in Blagnac (France) under approval FR.21G.0035 issued by DGAC to Airbus or in Hamburg (Germany) under approval DE.21G.0009 issued by LBA to Airbus.

From July 21, 2008 until May 5, 2009, A320 aircraft, all series, all models, have been produced in Blagnac (France) or Hamburg (Germany) under approval EASA.21G.0001 issued by EASA to Airbus.

From May 06, 2009, A320 aircraft, all series, all models, are produced in Blagnac (France), Hamburg (Germany) or Tianjin (People's Republic of China) under approval EASA.21G.0001 issued by EASA to Airbus.

From March 08, 2016, A320 aircraft, all series, all models, are produced in Blagnac (France), Hamburg (Germany), Mobile (USA) or Tianjin (People's Republic of China) under approval EASA.21G.0001 issued by EASA to Airbus.

Until April 14, 2008, a French "Certificat de Navigabilite pour Exportation," endorsed as noted under "Import Requirement," must be submitted for each individual aircraft for which application for U.S. certification is made.

From April 15, 2008 until July 20, 2008, a French "Certificat de Navigabilite pour Exportation," endorsed as noted under "Import Requirement," must be submitted for each individual aircraft produced in Blagnac for which application for U.S. certification is made or a German Export Certificate of Airworthiness endorsed as noted under "Import Requirement," must be submitted for each individual aircraft produced in Hamburg for which application for U.S. certification is made.

Since July 21, 2008, a EASA Export Certificate of Airworthiness endorsed as noted under "Import Requirement", must be submitted for each individual aircraft for which application for U.S. certification is made.

Import Requirements:

A FAA Standard Airworthiness Certificate may be issued based on a French "Certificat de Navigabilite pour Exportation," (Export C of A) signed by a representative of the Direction Generale de l'Aviation Civile (DGAC) of France on behalf of the European Community or based on a German Export C of A issued by a representative of LBA or based on a EASA Export C of A issued by a representative of EASA. The Export C of A should contain, containing the following statement: "The aircraft covered by this certificate has been examined, tested, and found to conform to the Type Design approved under FAA Type Certificate No. A28NM and to be in a condition for safe operation."

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, Airworthiness Certification of Aircraft, for requirements for issuance of an airworthiness certificate for imported aircraft."

Note:

In order for the FAA to make the finding that Airbus Model A320-216 aircraft that was produced before December 19, 2016 to be registered in the US is in a condition for safe operation, the FAA certificating inspector or other authorized person must assure the aircraft conforms to the Required Airworthiness Action List (RAAL) document number D000A5108/C00 Issue 2 dated December 19, 2016.

The RAAL contains a list of type design modifications and inspections that have been determined by the Director General of Civil Aviation (DGAC) France or European Aviation Safety Agency (EASA), which is the state of design authority for the Airbus A320-216, to be required to correct unsafe conditions discovered on the original type design of the A320-216. DGAC France and EASA issued Airworthiness Directives that require the accomplishment of these modifications and inspections to correct the identified unsafe conditions, and has advised the FAA of this mandatory continuing airworthiness information (MCAIs). Based on these MCAIs the FAA has determined that for Model A320-216 aircraft produced before December 19, 2016

the airworthiness actions identified in RAAL document number D16037131 Issue 1, are required in the interest of safety and are necessary for this airplane to be in a condition for safe operation.

Prior to issuance of a Standard Certificate of Airworthiness (C of A) on any Airbus A320-216 model aircraft produced before December 19, 2016 all airworthiness actions shown in the RAAL document number D16037131 Issue 1, must be accomplished. The airworthiness limitations associated with the type design of A320-216 must be included in the operator's airplane maintenance or inspection program. Any deviation from the RAAL must be approved by the Manager of the International Branch ANM-116, FAA Transport Airplane Directorate."

Certification Basis

- a. Part 25 of the FAR effective February 1, 1965, including Amendments 25-1 through 25-56 thereto.
- b. Based on 14 CFR Section 21.29(a) for new import Type Certificates (TCs), (or Section 21.101(g) for changes to TCs), applicable provisions of 14 CFR Part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.
- Special Federal Aviation Regulation (SFAR) No.27 effective February 1, 1974, including Amendments 27-1 through 27-5.
- d. Part 36 of the FAR effective December 1, 1969, including Amendments 36-1 through 36-12. See Note 16. 14 CFR part 36 through 36-31, Stage 5 for models: A320-216, A320-232, and A320-233. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.
- e. FAA Special Conditions issued for the A320 in accordance with Section 21.16 of the FAR:
 - (1) No. 25-ANM-23, Effective December 15, 1988:
 - Electronic Flight Controls
 - Active Controls
 - Engine Controls and Monitoring
 - Protection from Lightning and Unwanted Effects of Radio Frequency (RF) Energy
 - Flight Characteristics
 - Flight Envelope Protection
 - Side Stick Controllers
 - Flight Recorder.
 - (2) No. 25-ANM-29, Effective May 31, 1989:
 - Computerized Airplane Flight Manual
 - (3) No. 25-671-SC, Effective May 16, 2017:
 - Non-Rechargeable Lithium Batteries Applicable to Type design changes applied after May 16, 2017.
 Reference the applicability section of this special condition for more information on which Type design changes must meet it.
 - (4) No. 25-729-SC, Effective June 28, 2018:
 - Electronic System Security Protection from Unauthorized Internal Access Applicable to type design changes applied after June 28, 2018.
 - (5) No. 25-730-SC, Effective June 28, 2018:
 - Electronice System Security Protection from Unauthorized External Access Applicable to type design changes applied after June 28, 2018.
- f. For precision approach and landing, the applicable technical requirements are complemented by AC 120-29 and AC 120-28c.

For the automatic flight control system, the applicable technical requirements are complemented by AC 20-57A for automatic landing and by AC 25.1329-1A for cruise.

Use of JAR AWO where applicable to the requirements above, is acceptable.

- g. The following paragraphs of the FAR have been complied with through equivalent safety demonstrations:
 - 25.783(e) for cargo doors
 - 25.783(f) for passenger doors and bulk cargo door

- 25.813(c) for emergency exit access
- 25.811(e)(3) Type III emergency exit marking.
- h. Optional Requirements elected:
 - 25.801 for ditching.
 - 25.1419 for icing.

Certification Basis for Airbus Model A320 series airplanes with modification 160500 or 160080 installation of large wingtip device (Sharklet) see note 23:

The original certification basis for the Model A320 shown above for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-129 (i.e., the amendment in affect on the date of application April 8, 2010) applied to the components and areas affected by the change:

25.23, 25.25, 25.101, 25.109, 25.113, 25.115, 25.117, 25.161, 25.171, 25.173, 25.203, 25.235, 25.251, 25.301, 25.303, 25.305, 25.307(a)(d), 25.321, 25.331, 25.333, 25.335, 25.337, 25.341(a)(b), 25.343, 25.345, 25.349, 25.351, 25.365(a)(b)(d), 25.367, 25.371, 25.373, 25.391, 25.393(b), 25.427, 25.445, 25.457, 25.459, 25.471(a)(b), 25.473, 25.479(a)(c)(d), 25.481(a)(c), 25.483, 25.485, 25.489, 25.581, 25.601, 25.603, 25.605, 25.607, 25.609, 25.613, 25.619, 25.623, 25.625, 25.629, 25.631, 25.651, 25.671, 25.672, 25.683(b), 25.903(d)(1), 25.1011(b), 25.1385(a)(b)(d), 25.1387(a)(b)(c)(d), 25.1389, 25.1391, 25.1393, 25.1395, 25.1397, 25.1401, 25.1505, 25.1511, 25.1515, 25.1517, 25.1527, 25.1533, 25.1535, 25.1581, 25.1585(a)

Plus the following sections of 14 CFR part 25 amended as indicated below applied to the components and areas affected by the change per Airbus reversion justification:

25.21 Amdt 120 ¹	25.181 Amdt 107 ²
25.103 Amdt 107 ^{1&2}	25.201 Amdt 107 ²
25.105 Amdt 120 ¹	25.207 Amdt 107 ^{1&2}
25.107 Amdt 107 ^{1&2}	25.231 Amdt 107 ²
25.111 Amdt 120 ¹	25.233 Amdt 107 ²
25.119 Amdt 107 ^{1&2}	25.237 Amdt 107 ^{1&2}
25.121 Amdt 107 ^{1&2}	25.253 Amdt 120 ¹
25.123 Amdt 120 ¹	25.571(a)(b)(e) Amdt 86 ³
25.125 Amdt 107 ^{1&2}	25.981 Amdt 56 ⁴
25.143 except (g) Amdt 107 ^{1&2}	25.1001 Amdt 107 ¹
25.143(g) at Amdt 108 ¹	25.1301 Amdt 56 ⁵
25.145 Amdt 97 ^{1&2}	25.1309 Amdt 56 ⁵
25.147 Amdt 107 ²	25,1419 Amdt 56 ¹
25.149 Amdt 107 ²	25.1587 Amdt 107 ¹
25.175 Amdt 107 ²	

Notes:

- 1. FAA acceptance of these reversions was based on the fact that Airbus has done additional testing above the requirements incorporated by reference as documented in EASA AMC-F14, dated November 29, 1993, Flight in Icing Conditions, and a determination that compliance with the amendment in effect on the date of application for these rules (i.e., Amendment 25-121) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3). EASA AMC-F14 is incorporeated as part of certification basis for this airplane.
- 2. FAA acceptance of these reversions was based on fact that Airbus will show compliance with FAA Special Condtion 25-ANM-23 for V_{SR} and a determination that compliance with the amendment in effect on the date of application for these rules (i.e., Amendment 25-108) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).
- 3. FAA acceptance of this reversion was based on a determination that compliance with the amendment in affect on the dated of application for this rule (i.e., Amendment 25-96) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).

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- 4. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-102) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).
- 5. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).

Plus the following sections of part 25 amended as indicated below based on Airbus elect to comply:

25.107(e)(1)(iv) Amendment 25-135 25.177 Amendment 25-135

Special conditions:

The FAA Special Conditions applicable to each model as defined above remain applicable to aircraft equipped with Sharklet, except Paragraph 2 – Active Controls of FAA Special Condition 25-ANM-23 is replaced with the following special conditions:

- No. 25-469-SC Effective October 11, 2012 "Interaction of Systems and Structures"
- No. 25-470-SC Effective October 11, 2012 "Design Dive Speed"
- No. 25-471-SC Effective October 11, 2012 "Design Roll Maneuver Conditions"

Equivalent Safety Findings (ESFs):

The original ESFs applicable to each model as defined above remain effective for aircraft equipped with Sharklet plus the following ESF for aircraft equipped with Sharklet:

25.331 – Use of EASA Certification Specification (CS) 25.331 in lieu of 14 CFR 25.331 for checked pitch maneuver (reference ELOS memorandum TD000885IB-T-A-5)

25.1419 – Analysis instead of flight testing in natural icing conditions (reference ELOS memorandum TD00885IB-T-SE-1)

Noise standards

14 CFR 21.93(b) - No acoustical change

Fuel venting and exhaust emissions standards

Not affected by the change. The initial requirements remain applicable.

Optional Requirements elected

- 25.801 for ditching.
- 25.1419 for icing.
- 25.1535 for ETOPS

Part 26

14 CFR part 26 effective December 10, 2007, including Amendments 26-1 through 26-3.

Certification basis for the Airbus Model A320-214, -232 and -233 installed with large wingtip device (Sharklet Modification 160500) and Modification 156723 (Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 190 passengers:

The original certification basis for the Model A320-214, -232 and -233 installed with large wingtip device (Sharklet Modification 160500) plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-139 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	139	Fuselage Structure
25.321	139	Fuselage Structure
25.331	139	Fuselage Structure
25.341(a)(b)	139	Fuselage Structure
25.351	139	Fuselage Structure

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14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.473	139	Fuselage Structure
25.479(a)(c)(d)	139	Fuselage Structure
25.481(a)(c)	139	Fuselage Structure
25.489	139	Fuselage Structure
25.801(d)	139	Entire Airplane
25.803(c)	139	Cabin Interior
25.807	139	Cabin Interior
25.810	139	Cabin Interior
25.815	139	Cabin Interior
25.1447(c)(1)	139	Passenger equipment associated with increased MPSC
25.1519	139	Entire Airplane
25.1529	139	ICA associated with increased MPSC
25.1541(a)(b)	139	Marking & Placards associated with increased MPSC
25.1557(a)	139	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-139 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
25.305(a)(b),25.307(a),25.365(a)	129
25.562	64
25.571(a)(b)	86
25.561,25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(k)(l), 25.813(c), 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.853(c)(d)(e)	116

Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification 156723 (MaxPax):

AT10259IB-T-CS-2

§ 25.807 Emergency Exits

Finding for Increase of the Maximum Passenger Capacity (MPSC) from 179 passengers to 190 passengers

Optional Design Regulations:

ETOPS:

Model A320-214,-232 and -233 airplanes installed with large wingtip device (Sharklet Modification 160500) and 156723 (MaxPax) have not been evaluated for extended operations (ETOPS) type design approval.

Part 26:

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width, starting at the aircraft aisle centerline and extending 21 inches outboard from the aircraft aisle centerline, must be a minimum of 23.2 inches. Any attendant seat/fixture installed on the side of the exit passageway must not result in a passageway less than 23.2 inches for the inboard portion of the passageway. The remaining passageway (starting 21 inches from the aircraft centerline to the emergency exit) must be a minimum of 20 inches. The height of the attendant seat/fixture is limited to a maximum height of 56.5 inches.
- The unobstructed exit dimensions of the floor level emergency exits must not be less than 32 inches x 73 inches.
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at doors 1 and 4.
- The wide slides installed at doors 1 and 4 must have a beam strength meeting the requirements of TSO C69c.

Certification basis for the Airbus Model A320-211, -212, -214, -231, -232 and -233 installed with Wing Tip Fence (WTF) and Max Pax Modification 158708 & 157968, for the certification of a Maximum Passenger Seating Capacity (MPSC) of 180 for 157968 or 190 for 158708 passengers:

The original certification basis for the Model A320-211, -212, -214, -231, -232 and -233 installed with WTF plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-141 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	141	Fuselage Structure
25.321	141	Fuselage Structure
25.331(a)(b)(c)(1)	141	Fuselage Structure
25.341(a)	141	Fuselage Structure
25.351	141	Fuselage Structure
25.473	141	Fuselage Structure
25.479(a)(c)(d)	141	Fuselage Structure
25.481(a)(c)	141	Fuselage Structure
25.489	141	Fuselage Structure
25.801(d)	141	Entire Airplane
25.803(c)	141	Cabin Interior
25.807	141	Cabin Interior
25.810	141	Cabin Interior
25.815	141	Cabin Interior
25.1447(c)(1)	141	Passenger equipment associated with increased MPSC
25.1529	141	ICA associated with increased MPSC
25.1541(a)(b)	141	Marking & Placards associated with increased MPSC
25.1557(a)	141	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-141 would not materially increase the level of safety:

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14 CFR Section	FAA Accepted Amendment Level
25.305(a)(b),25.307(a), 25.331(c)(2), 25.341(b), 25.365(a),25.561, 25.571(a)(b), 25.785,25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(k)(l), 25.813, 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.562	64
25.853(c)(d)(e)	116

Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification 157968 (MaxPax):

AT10482IB-T-CS-2 § 25.807 Emergency Exits Finding for Increase of the Maximum Passenger Capacity (MPSC) from 179 passengers to 180

passengers

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification 158708 (MaxPax):

AT10621IB-T-CS-2 § 25.807 Emergency Exits Finding for Increase of the Maximum Passenger Capacity (MPSC) from 179 passengers to 190

passengers

Optional Design Regulations:

ETOPS:

Model A320-211, -212, -214, -231, -232 and -233 installed with WTF and MaxPax have not been evaluated for extended operations (ETOPS) type design approval.

Part 26:

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width, starting at the aircraft aisle centerline and extending 21 inches outboard from the aircraft aisle centerline, must be a minimum of 23.2 inches. Any attendant seat/fixture installed on the side of the exit passageway must not result in a passageway less than 23.2 inches for the inboard portion of the passageway. The remaining passageway (starting 21 inches from the aircraft centerline to the emergency exit) must be a minimum of 20 inches. The height of the attendant seat/fixture is limited to a maximum height of 56.5 inches.
- The unobstructed exit dimensions of the floor level emergency exits must not be less than 32 inches x 73 inches.
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at doors 1 and 4.
- The wide slides installed at doors 1 and 4 must have a beam strength meeting the requirements of TSO C69c.

Certification basis for the Airbus Model A320-251N,-252N,-271N, -272N and -273N(Single Aisle New Engine Option):

The certification basis for the Airbus Model A320 series airplanes with Modification 160500 installation of large wingtip device (Sharklet) shown above for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-136 (i.e., the amendment in affect on the date of application) applied to the components and areas affected by the change:

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25.3, 25.23(a)(b), 25.25(a)(b), 25.27, 25.101, 25.107(e)(1)(iv), 25.109, 25.113, 25.115, 25.117, 25.147, 25.149, 25.161, 25.171, 25.173, 25.175, 25.177, 25.181, 25.201, 25.203, 25.231, 25.233, 25.235, 25.251(a)(b)(c)(d)(e), 25.253(a)(b), 25.255, 25.301*, 25.303*, 25.305(a)(b)(c)*, 25.307(a)(d)*, 25.321(a)(b)(c)(d), 25.331(a)(b)(c), 25.333(a)(b),25.335(a)(b)(c)(d)(e)(f), 25.337, 25.341(a)(b), 25.343(a)(b), 25.345(a)(b)(d), 25.349(a)(b), 25.351, 25.361, 25.363, 25.361, $25.365(a)(b)(c)(d)(e)^*$, 25.367(a)(b), 25.371, 25.373, 25.391(a)(b)(c)(d)(e), 25.427(a)(b)(c)(d), 25.445(a)(b), 25.457, 25.459, 25.471(a)(b), 25.473, 25.479(a)(c)(d), 25.481(a)(c), 25.483, 25.485(a)(b), 25.489, 25.491, 25.493(b)(c)(d),25.495, 25.499(a)(b)(c)(d)(e), 25.503(a)(b), 25.507(a)(b)(c), 25.509(a)(c)(d), 25.511, 25.519(a)(b)(c), 25.563, 25.581,25.601*, 25.603, 25.605, 25.607, 25.609*, 25.613, 25.619*, 25.623*, 25.625, 25.629, 25.631*, 25.651*, 25.671, 25.672(a)(b)(c), 25.683(b), 25.703(a)(b)(c), 25.721(a)(b)(c), 25.777, 25.779(b), 25.789, 25.801, 25.841(a), 25.843(b), 25.851(b), 25.855(c), 25.863 (a)(b)(c)(d), 25.865, 25.867(a)(b)*, 25.869(a)(b)(c), 25.901(a)(b)(c), 25.903, 25.904, 25.933(a), 25.934, 25.939 (a)(c), 25.943, 25.951(a)(b)(c)(d)*, 25.952(a)(b), 25.954, 25.955(a), 25.959, 25.961, 25.963(a)(d), 25.969, 25.971, 25.975, 25.981 except 25.981(a)(3)**, 25.993(a)(b)(c)(d)(e), 25.994, 25.995, 25.997(a)(b)(c)(d), 25.999(a)(b), 25.1001, 25.1011(a)(b), 25.1013(a)(b)(c)(d)(e)(f), 25.1015(a)(b), 25.1017(a)(b), 25.1017(a25.1091(a)(b)(c)(d)(e), 25.1093(b), 25.1103(b)(c)(d), 25.1121, 25.1123, 25.1141, 25.1143, 25.1145, 25.1155, 25.1163, 25.1165, 25.1167, 25.1181, 25.1182, 25.1183, 25.1185, 25.1187, 25.1189, 25.1191, 25.1193, 25.1195, 25.1197, 25.1199, 25.1201, 25.1203, 25.1207, 25.1301*, 25.1305, 25.1309*, 25.1316, 25.1317, 25.1337, 25.1353(a)(b)*, 25.1355(c), 25.1357(a)*, 25.1363, 25.1401(b), 25.1403, 25.1431*, 25.1438, 25.1461, 25.1501, 25.1503, 25.1507, 25.1511, 25.1513, 25.1515, 25.1517, 25.1519, 25.1521(a)(c)(d), 25.1525, 25.1527, 25.1529, 25.1531, 25.1533, 25.1535*, 25.1549(a)(b)(c), 25.1553, 25.1581, 25.1583, 25.1585, 25.1587, 25.1591, 25.1701(a)*, 25.1703(a)(b)(d)*, 25.1705*, 25.1707*, 25.1709*, 25.1711*, 25.1713*, 25.1715*, 25.1717*, 25.1719*, 25.1723*, 25.1725*, 25.1727*, 25.1731*

- * For new and modified parts only (engine, pylon, nacelle, bleed air system, wing structural changes in area of pylon and landing gear reinforcement)
- ** FAA acceptance of this exception is for the Fuel Quanty Indicating System (FQIS) and Fuel Level Sensor System (FLSS) wiring installation changes and fuel tank structural fastener changes only and is based on the following design features incorporated on the NEO: The FQIS/FLSS wiring is within the S-routes in pressurized areas and is isolated with protective textile sleeving with CAUTION, FUEL TANK HARNESS ONLY" labels. The FQIS/FLSS wiring is within the S-routes in non-pressurized areas and is isolated with protective heat shrink sleeving and routed with the rest of the S-route bundle in PTFE conduit up to fuel tank walls penetration with "CAUTION, FUEL TANK HARNESS INSIDE" labels. Wiring production breaks from Avionic bays to the the tank walls is done through dedicated connectors. The fuel tank structural fastener changes meet the criteria for the use of exceptions in FAA policy ANM-112-08-002 "Policy on Issuance of Special Conditions and Exemptions Related to Lightning Protection of Fuel Tank Structure," dated May 26, 2009.

Plus the following sections of 14 CFR part 25 amended as indicated below applied to the components and areas affected by the change per Airbus reversion justification:

25.21 Amdt. 120 ¹	25.561(a)(b)(c)(d) Amdt. 64 ²
25.103 Amdt. 120 ¹	25.571(a)(b)(e)(1) Amdt. 86 ³
25.105 Amdt. 120 ¹	25.611 Amdt. 56 ⁴
25.107 (except (e)(1)(iv)) Amdt 120 ¹	25.677(b) Amdt. 56 ⁵
25.111 Amdt. 120 ¹	25.899 Amdt. 56 ⁶
25.119 Amdt. 120 ¹	25.1317 Amdt. 56 ⁷
25.121 Amdt. 120 ¹	25.1322 Amdt. 56 ⁸
25.123 Amdt. 120 ¹	25.1329 Amdt. 56 ⁹
25.125 Amdt. 120 ¹	25.1351 Amdt. 56 ¹⁰
25.143 Amdt. 120 ¹	25.1419 Amdt. 120 ¹
25.145 Amdt. 97 ¹	25.1435 Amdt. 56 ¹¹
25.207 Amdt. 120 ¹	25.1459(a) Amdt. 56 ¹²
25.237 Amdt. 120 ¹	Appendix H at amdt 56 ¹³
25.253(c) Amdt. 120 ¹	

Notes:

1. FAA acceptance of these reversions was based on the fact that Airbus has done additional testing above the requirements incorporated by reference as documented in the summary of EASA CRI B-06, issue 2, dated April 11, 2013, Flight in Icing Conditions, and a determination that compliance with the amendment in effect on the date of

application for these rules (i.e., Amendment 25-121) would not materially increase the level of safety exception, or in some cases, would be impractical in accordance with 14 CFR 21.101(b)(3). EASA CRI B-06 is incorporated as part of certification basis for this airplane.

- 2. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-91) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 3. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-132) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 4. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 5. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-115) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 6. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 7. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-122) would not materially increase the level of safety above Special Condition 25-ANM-23 in accordance with 14 CFR 21.101(b)(3).
- 8. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-131) would be impractical in accordance with 14 CFR 21.101(b)(3).
- 9. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-119) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 10. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-72) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 11. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-104) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 12. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-124) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 13. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).

Plus the following sections of 14 CFR part 25 amended as indicated below per Airbus elect to comply:

25.853(a)(1) at Amendment 25-66 25.853(c) at Amendment 25-59

Special conditions:

FAA Special Condition 25-ANM-23 applicable to each model as defined in FAA TCDS A28NM remains applicable, except:

Paragraph 2 – Active Controls is replaced with the following special conditions:

No. 25-469-SC Effective October 11, 2012 - "Interaction of Systems and Structures"

- No. 25-470-SC Effective October 11, 2012 "Design Dive Speed"
- No. 25-471-SC Effective October 11, 2012 "Design Roll Maneuver Conditions"

Paragraph 4 – Protection from Lightning and Unwanted Effects of Radio Frequency is replaced with the following later requirements:

- 25.1316 thru amendment 25-136
- 25.1317 thru amendment 25-136

In addition the following FAA Special Condition applies specifically to the Airbus SA NEO program:

• No. 25-582-SC Effective April 30, 2015 - "Transient Engine Failure Loads"

Equivalent Safety Findings (ESFs):

The ESFs applicable to each model as defined in FAA TCDS A28NM remain applicable plus the following ESFs applied specifically to the Airbus SA NEO program:

ELOS Memo	Regulation	<u>Subject</u>
AT00949IB-T-P-10	25.779(b)(1)	Throttle Motion During Reduced (Flexible) Takeoff Thrust Operations and/or Go-Around
AT00949IB-T-P-11	25.1549(a), (b) and (c)	Digital Display of High Pressure Rotor Speed (N2)
AT00949IB-T-P-12	25.1549(a)	Oil Temperature Indication
AT00949IB-T-P-13	25.997(d) & 25.1305(c)(6)	Fuel Filter Bypass Indication (CFMI only)
AT00949IB-T-P-14	25.1193(e)(3)	Resistance to Fire of Cowling
AT00949IB-T-P-15	25.1181(a)(6) & (b), & 25.1195 thru 25.1203	Fan Zone Non-fire Zone (PW only)
AT00949IB-T-P-17	25.933(a)(1)(ii)	Flight Critical Thrust Reverser
AT00949IB-T-P-19	25.934	Thrust Reverser Testing
AT00949IB-T-P-21	25.1181(a)(6) &	PW1100G-JM 2.5 Bleed & Track lock Areas and PW1100G-JM and
	(b), 25.1182 and 25.1195 through 25.1203	LEAP-1A Areas Adjacent to Designated Fire Zones
AT00949IB-T-SA-1	25.1301 and 25.1309	Equipment, Systems, and Installation Requirements: Use of ARAC Recommendations

Exemptions:

The Exemptions applicable to each model as defined in TCDS A28NM remain applicable plus the following exemption applied specifically to the Airbus SA NEO models:

Exemption No. 13048 for 25.841(a) dated September 25, 2015 (13048A dated February 22, 2018, 13048B dated March 6, 2019.)

Optional Requirements elected

- § 25.801 for ditching.
- § 25.1419 for icing.
- § 25.1535 for ETOPS

Noise standards

14 CFR part 36 though Amendment 36-30, Stage 4.

14 CFR part 36 through amendment 36-31, Stage 5 for models A320-251N, -252N, -253N, -271N, -272N, and -273N. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.

Fuel venting and exhaust emissions standards

14 CFR part 34 as amended by Amendment 34-1 through 34-5.

Part 26

14 CFR part 26 as amended by Amendment 26-1 through 26-5.

Additional Design Requirements and Conditions

Compliance with the established basis for type certification notwithstanding, § 21.21(b)(2) precludes issuance of a type certificate if there is any feature or characteristic that would make the product unsafe. The following design details or information must be maintained to ensure that an unsafe design condition is not present:

In-flight Engine Restart

- 1. A minimum restart capability after an all engines out scenario must be established under the following conditions using procedures provided in the airplane flight manual (AFM):
 - a) During the take-off and the initial climb-out portion of the flight, the airplane should have the capability for the flightcrew to restore engine power when the fuel source to the engine is interrupted.
 - b) During the high altitude portion of the flight at cruise speed and maximum altitude, the airplane should have the capability for the flightcrew to restart from a stabilized windmill speed those engines required to maintain level flight or should have the capability for the flightcrew to restart all but one of the engines and produce maximum continuous thrust or power by an altitude of 15,000 feet.
 - During flight at speeds greater than the minimum flaps-up "holding speed" and at altitudes below 20,000 feet, the airplane should have the capability for the flightcrew to restart with the engines at stabilized windmill speed those engines necessary to maintain safe flight and arrest the airplane descent within a total altitude loss of 5,000 feet prior to exceeding an airspeed of 300 knots.

Certification basis for the Airbus Models A320-251N, A320-271N installed with modification # 156723 (Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 190 passengers:

The original certification basis for the Models A320-251N, A320-271N plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-141 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	141	Fuselage Structure
25.321	141	Fuselage Structure
25.331	141	Fuselage Structure
25.341(a)(b)	141	Fuselage Structure
25.351	141	Fuselage Structure
25.473	141	Fuselage Structure
25.479(a)(c)(d)	141	Fuselage Structure
25.481(a)(c)	141	Fuselage Structure
25.489	141	Fuselage Structure
25.801(d)	141	Entire Airplane
25.803(c)	141	Cabin Interior
25.807	141	Cabin Interior
25.810	141	Cabin Interior
25.815	141	Cabin Interior
25.1447(c)(1)	141	Passenger equipment associated with increased MPSC
25.1519	141	Entire Airplane
25.1529	141	ICA associated with increased MPSC
25.1541(a)(b)	141	Marking & Placards associated with increased MPSC
25.1557(a)	141	Marking & Placards associated with increased MPSC

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The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-141 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
25.561, 25.785, 25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(k)(l), 25.813, 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.562	64
25.571(a)(b)	86
25.853(c)(d)(e)	116
25.305(a)(b), 25.307(a), 25.365(a), 25.901(c),	136

Special Conditions:

The special conditions applied to the baseline Models A320-251N, A320-271N are also applicable to modification 156723 (MaxPax).

Equivalent Safety Findings:

The ELOS findings applied to the baseline Models A320-251N, A320-271N are also applicable to modification 156723 (MaxPax).

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to modification 156723 (MaxPax):

AT10555IB-T-CS-3 AT10627IB-T-CS-4 § 25.807 Emergency Exits

Finding for Increase of the Maximum Passenger Capacity (MPSC) from 179 passengers to 190 passengers

Exemptions:

The exemptions applied to the baseline Model A320-271N are also applicable to modification 156723 (MaxPax).

Optional Design Regulations:

Ditching & Flight in Icing Conditions:

Original design approvals for the Models A320-251N, A320-271N are also applicable to modification 156723 (MaxPax).

Noise Standards:

The Models A320-251N, A320-271N airplanes with Modification 156723 (MaxPax), does not increase the noise levels of the airplane and therefore does not constitute an "acoustical change".

14 CFR 21.93(b) – no acoustical change.

Fuel Venting and Exhaust Emissions Standards:

14 CFR 21.93(c) – no emissions change

Part 26:

The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45

Additional Design Requirements and Conditions:

Limitations:

• The exit passageway width, starting at the aircraft aisle centerline and extending 21 inches outboard from the aircraft aisle centerline, must be a minimum of 23.2 inches. Any attendant seat/fixture installed on the side of the exit passageway must not result in a passageway less than 23.2 inches for the inboard portion of the passageway. The

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remaining passageway (starting 21 inches from the aircraft centerline to the emergency exit) must be a minimum of 20 inches. The height of the attendant seat/fixture is limited to a maximum height of 56.5 inches.

- The unobstructed exit dimensions of the floor level emergency exits must not be less than 32 inches x 73 inches"
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches) must be installed at the forward most and aft most floor level Type I exits (generally designated as doors 1 and 4).
- The wide slides installed at the forward most and aft most floor level Type I exits (generally designated as doors 1 and 4) must have a beam strength meeting the requirements of TSO C69c.

Certification basis for the Airbus Model A320-214, -216, -232 & -233 installand modification 160080 (Sharklet In Service Retrofit) and modification158819 (Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 190 passengers:

The original certification basis for the Model A320-214, -216, -232 & -233 plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-143 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	143	Fuselage Structure
25.321	143	Fuselage Structure
25.331(a)(b)(c)(1)(c)(2)	143	Fuselage Structure
25.341(a)	143	Fuselage Structure
25.351	143	Fuselage Structure
25.473	143	Fuselage Structure
25.479(a)(c)(d)	143	Fuselage Structure
25.481(a)(c)	143	Fuselage Structure
25.489	143	Fuselage Structure
25.795(d)	143	Cabin Interior excl lavatories
25.801(d)	143	Entire Airplane
25.803(c)	143	Cabin Interior
25.807(g)	143	Cabin Interior
25.810	143	Cabin Interior
25.815	143	Cabin Interior
25.1447(c)(1)	143	Passenger equipment associated with increased MPSC
25.1519	143	Entire Airplane
25.1529	143	ICA associated with increased MPSC
25.1541(a)(b)	143	Marking & Placards associated with increased MPSC
25.1557(a)	143	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-143 would not materially increase the level of safety:

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14 CFR Section	FAA Accepted Amendment Level
25.305(a)(b),25.307(a),25.341(b) 25.365(a), 25.561, 25.785, 25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(k)(l), 25.813, 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.571(a)(b)	86
25.562	64
25.853(c)(d)(e)	116
25.365(a), 25.901(c)	136

Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification 159536 (MaxPax):

CS-2	§ 25.807 Emergency Exits	Finding for Increase of the Maximum Passenger Capacity (MPSC) from 179 passengers to 190 passengers
CS-6	§ 25.807 Emergency Exits	Finding for Increase of the Maximum Passenger Capacity (MPSC)

Optional Design Regulations:

ETOPS:

Model <u>A320-214, -216, -232 & -233</u> airplanes installed with modification <u>158819</u> (MaxPax) have not been evaluated for extended operations (ETOPS) type design approval.

Part 26:

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width must meet the regulatory minimum of 20 inches. The height of the attendant seat or other assembly is limited to a maximum height of 57 inches.
- The unobstructed exit dimensions of the forward and aft most floor level emergency exits must not be less than 32 inches x 73 inches.
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at the forward and aft
 most exits.
- The wide slides installed at the forward and aft most floor level exits must have a beam strength meeting the requirements of TSO-C69c.

Certification basis for the Airbus Models A320-252N, A320-253N, A320-272N, A320-273N installed with modification # 156723 (Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 190 passengers:

The original certification basis for the Models A320-252N, A320-253N, A320-272N, A320-273N plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-145 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	141	Fuselage Structure
25.321	141	Fuselage Structure
25.331	141	Fuselage Structure
25.341(a)(b)	141	Fuselage Structure
25.351	141	Fuselage Structure
25.473	141	Fuselage Structure
25.479(a)(c)(d)	141	Fuselage Structure
25.481(a)(c)	141	Fuselage Structure
25.489	141	Fuselage Structure
25.801(d)	141	Entire Airplane
25.803(c)	141	Cabin Interior
25.807/ IP-CS3/CS4	141	Cabin Interior
25.810	141	Cabin Interior
25.815	141	Cabin Interior
25.1447(c)(1)	141	Passenger equipment associated with increased MPSC
25.1519	141	Entire Airplane
25.1529	141	ICA associated with increased MPSC
25.1541(a)(b)	141	Marking & Placards associated with increased MPSC
25.1557(a)	141	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-141 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
25.561, 25.785, 25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(1)(2)(k)(1), 25.813, 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.562	64
25.571(a)(b)	86
25.853(c)(d)(e))/IP CI-10	116
25.305(a)(b), 25.307(a), 25.365(a), 25.901(c),	136

Special Conditions:

The special conditions applied to the baseline Models A320-252N, A320-253N, A320-272N, A320-273N are also applicable to modification 156723 (MaxPax).

Equivalent Safety Findings:

The ELOS findings applied to the baseline Models A320-252N, A320-253N, A320-272N, A320-273N are also applicable to modification 156723 (MaxPax).

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to modification 156723 (MaxPax):

AT11084IB-T-CS-4

§ 25.807 Emergency Exits

Finding for Increase of the Maximum Passenger Capacity (MPSC) from 179 passengers to 190 passengers

Exemptions:

The exemptions applied to the baseline Models A320-252N, A320-253N, A320-272N, A320-273N are also applicable to modification 156723 (MaxPax).

Optional Design Regulations:

Ditching & Flight in Icing Conditions:

Original design approvals for the Models A320-252N, A320-253N, A320-272N, A320-273N are also applicable to modification 156723 (MaxPax).

Noise Standards:

The Models A320-252N, A320-253N, A320-272N, A320-273N airplanes with Modification 156723 (MaxPax), does not increase the noise levels of the airplane and therefore does not constitute an "acoustical change".

14 CFR 21.93(b) – no acoustical change.

Fuel Venting and Exhaust Emissions Standards:

14 CFR 21.93(c) – no emissions change

Part 26:

The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45

Additional Design Requirements and Conditions:

Limitations:

- The exit passageway width, starting at the aircraft aisle centerline and extending 21 inches outboard from the aircraft aisle centerline, must be a minimum of 23.2 inches. Any attendant seat/fixture installed on the side of the exit passageway must not result in a passageway less than 23.2 inches for the inboard portion of the passageway. The remaining passageway (starting 21 inches from the aircraft centerline to the emergency exit) must be a minimum of 20 inches. The height of the attendant seat/fixture is limited to a maximum height of 56.5 inches.
- The unobstructed exit dimensions of the floor level emergency exits must not be less than 32 inches x 73 inches"
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches) must be installed at the forward most and aft most floor level Type I exits (generally designated as doors 1 and 4).
- The wide slides installed at the forward most and aft most floor level Type I exits (generally designated as doors 1 and 4) must have a beam strength meeting the requirements of TSO C69c.

Note 1:

The A320 basic type design definition for U.S. import certification is contained in the following documents:

- AI/A 414.282/88 for the A320 Models -111 and -211
- AI/EA-A 413.628/89 for the A320 Model -231
- AI/EA-A 412.1631/90 for the A320 Model -212
- AI/EA-A 414.0665/93 for the A320 Model -232
- AI/EA-S 413.2143/95 for the A320 Model -233
- AI/EA-S 413.0150/95 for the A320 Model -214
- AI/EA-S 413.3004/96 (supplement) for the A320 Model -214
- 00D000A5070/C20. for the A320-271N
- 00D000A5073/C20 for the A320-251N
- $00D000A5086\slash{\text{C}}20$ for the A320 Model -216
- 00D000A5191/C00 for the A320-252N

- 00D000A5207/C00 for the A320-272N
- 00D000A5232/C00 for the A320-253N
- 00D000A5234/C00 for the A320-273N

Note 2:

For models, A320-211 and A320-212, modification 21038 is the minimum standard to be qualified for Cat IIIB precision approach.

For models A320-231 modification 21039 is the minimum standard to be qualified for Cat IIIB precision approach.

A320-214, A320-232, A320-233 are qualified for Cat IIIB precision approach per basic design definition. This does not constitute an operational approval.

For models A320-251N, A320-252N, A320-271N & A320-272N modification 161765 is the minimum standard to be qualified for CAT IIIB precision approach.

Note 3:

All Models of A320 airplanes manufactured after January 1, 1997 must have either modification 25302 (thrust reverser third line of defense for IAE V2500 engines) or 25303 (thrust reverser third line of defense for CFM engines) installed, before the individual U.S. standard Certificate of Airworthiness can be issued.

Note 4:

If modification 25800 is embodied on models with CFM56-5B engines, the engine performance is improved. The engine denomination changes to /P.

CFM56-5B/"non-P" engine can be intermixed with CFM56-5B/P engine on the same aircraft.

Note 5:

If modification 26610 is embodied on A320-214 airplanes, the engine performance and gaseous emission levels are improved. The engine denomination changes to /2P (DAC IIC Dual Annual Combustor).

- CFM56-5B4/P engine can be intermixed with CFM56-5B4/2P (DAC IIC Dual Annual Combustor) engine on the same aircraft (AFM Supplement).
- CFM 56-5B/2 "non P" (DAC) engine can be intermixed with CFM 56-5B/2P (DAC II C) engine on the same aircraft (AFM supplement).
- CFM 56-5B/P or / "non P" (SAC) engine can be intermixed with CFM 56-5B/2P (DAC II C) engine on the same aircraft (AFM supplement).

Note 6:

For A320-200 series airplanes with OCTOPUS Airplane Flight Manual, Airbus elected to comply with Part 25 Amendment 25-92.

Note 7:

If modification 23755 is embodied on A320 airplanes, the maximum permissible gas temperature for take-off and max. continuous operation is extended to 915° C and 880° C, respectively. However, the ECAM indication remains at 890° C and 855° C, respectively. The engine denomination changes to /F.

A320-211 CFM 56-5A1 engine can be intermixed with CFM 56-5A1/F engine on the same aircraft.

Note 8:

On A320-200 series aircraft, one Additional Center Tank (ACT) in bulk version is defined by modification 34456 (low pressure system). The approval together with structural and system provisions was subject of compliance demonstrated to Advisory Circular AC 25-8.

<u>Note 9</u>:

A320-231 with modification 23872 (EGT redline increase for IAE V2500 engines):

- for consolidated bump rating operation (mod 22461 or 23408), the maximum permissible gas temperature is extended to 650° C at take-off. The ECAM indication remains at 635°;
- for non rating bump operation, the maximum permissible gas temperature is extended to 640° C at take-off. The ECAM indication remains at 635° C;
- for maximum continuous and take-off operation, the maximum permissible gas temperature is extended to 615° C. The ECAM indication remains at 610° C.

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Note 10:

A320-231 with modification 25000 (FADEC Standard SCN12C for IAE engines):

- for take-off operation, the maximum permissible gas temperature is extended to 650° C. The ECAM indication remains at 635°C;
- for maximum continuous operation, the maximum permissible gas temperature is extended to 625° C. The ECAM indication remains at 610° C.

Note 11:

If modification 37147 (Tech insertion program) is embodied in production or 38770 (Tech insertion program retrofit) is embodied in service on A320 airplanes, the engine performance and gaseous emission levels are improved. The engine demonintion changes to /3.

Note 12:

If modification 37868 (Select One Package) is embodied in production or if modification 38554 (Select One Package for Retrofit) is embodied on in-service A320 airplanes the engine performance and gaseous emission levels are improved. The engine denomination itself does not change.

Note 13:

If modification 38573 is embodied in service on A320 airplanes, engine hardware configurations can be intermixed with one CFM56-5Bx/3 SAC (Tech Insertion) and one CFM56-5Bx/P SAC engines.

Note 14:

If modification 34119 is embodied in production on A320 airplanes, CFM56-5B SAC (Single Annular Combustor) and CFM56-5B DAC (Double Annular Combustor) engines can be intermixed on the same aircraft.

Note 15:

If modification 150016 (structural and system provision for deactivation of the second pair of overwing emergency exits) is embodied on A320 airplanes, the aircraft is eligible for a maximum capacity of 145 passengers. The maximum number of passengers between any of the overwing exit doors and rear door is 90.

Note 16:

Further to "D/E/J Noise" Project approval, from November, 05th, 2009, all A320 airplane/engine configurations are eligible to be in compliance with ICAO Annex 16, Chapter 4 and FAR Part 36, Stage 4 (including Amdt 36-28).

Note 17:

From March, 31, 2008, there is no longer any CFM56-5B4 non /P in field or in production.

Note 18

For A320-211, -212, -231, -232 and -233 models, the embodiment of modification 37734 leads to change the maintenance program and its associated Maintenance Programme Publication Trigger from 48,000FC/60,000FH to 37,500FC/80,000FH (whichever occurs first).

Note 19:

If modification 38946 ("BUMP" function) is embodied on models with CFM-5B engines, the engine denomination changes to /P1 (SAC) or /2P1(DAC) or /3B1 (Tech Insertion).

The engine characteristics defined in this section remain unchanged.

Intermix at aircraft level between "Non Bump" engine and "Bump" engine is not allowed.

Note 20:

If modification 150206 is embodied on A320 airplanes, the aircraft is eligible for a maximum capacity of 150. The airplane is fully compliant with:

- FAR121-311 Amdt 121-315
- Section 25.562 Amendment 25-64 for all passenger seats and flight attendant seats and
- FAA Special Condition 25-375-SC for installation of inflatable restraints.

Note 21:

If modification 151226 is embodied on A320 airplanes the airplane is fully compliant with:

- FAA Special Condition No. 25-403-SC for seat backs with large non-metallic panels and
- Section 25.562 Amendment 25-64 for all passenger seats and flight attendant seats.

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Note 22:

If Modification 160001 for installation of structural provisions for new large wingtip device (Sharklet) is embodied on A320 airplanes equipped with either CFM 56 or IAE V2500 engines the usable fuel quantities are reduced as shown above to account for the loss of volume due to structural reinforcements in the wing and center wing box.

Note 23:

If Modification 160500 for installation of new large wingtip devices (Sharklet) is embodied on A320 series airplanes the eco efficiency and payload-range performance is improved. Modification 160500 is approved for WV 008 to WV 019, only. If modification 160080 for retrofit installation of new large wingtip devices (Sharkelt) is embodied on in-service A320series airplanes the eco efficiency and payload-range performance is improved. Modification 160080 is approved for MSN 1200 and above only without Airbus Modification 160001 reinforced center wingbox, and for WV 008 to 014, 016, 018 and 019 only. The certification basis for Modification 160500 and 160080 is shown above.

Note 24:

On series A320-200 airplanes equipped with CFM 56 engines, introduction of standard of wingbox without dry bay (modification 37331) increases the wing fuel capacity by 350 liters.

Note 25:

If Modification 150364 is embodied on A320 airplanes the aircraft can be operated with 150 passengers and with 3 cabin attendants for increased cabin operational flexibility.

Note 26:

On series A320-200 airplanes, one or two Additional Center Tanks (ACT) in bulk version are defined by modification 28378 (low pressure system). Their approval together with structural and system provisions was subject of compliance demonstrated to AC 25-8.

Note 27:

If Modifications 156723 (MAX PAX) is installed on Models A320-214,-232 and -233 with large wingtip devices (Sharklets - Modification 160500), the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 190 passengers.

Note 28:

If Modifications 157968 (MAX PAX) is installed on Models A320-211, -212, -214, -231, -232 and -233 with Wing Tip Fence (WTF), the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 180 passengers.

Note 29:

If modification 161562 (Alternate climb) is installed on the Model A320-271N the engine designation changes to PW1127GA-JM.

Note 30:

If Modifications 158708 (MAX PAX) is installed on Models A320-211, -212, -214, -231, -232 and -233 with Wing Tip Fence (WTF), the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 190 passengers.

Note 31:

Limitations associated with installation of MAX PAX Modification 159115 are referenced in ELOS Memo AT10769IB-T-CS-6 dated May 16, 2017.

Note 32:

If Modifications 158819 (MAX PAX) is installed on Models <u>A320-214</u>, -216, -232 & -233 with modification 160080 (sharklet in service retrofit), the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 190 passengers.

Note 33:

For A320-211, -212, -214, -231, -232 and -233 models, the embodiment of modification 39020 leads to change the maintenance program and its associated Maintenance Programme Publication Trigger from 48,000FC/60,000FH or 37,500FC/80,000FH to 60,000FC/120,000FH (whichever occurs first).

Note 34:

If Modifications 156723 (MAX PAX) is installed on Models A320-251N, -252N, -253N, -271N, -272N, and -273N, the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 190 passengers.

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IV. Type A321-100/200 Series Transport Category Airplanes

- Model A321-111, Approved December 20, 1995;
- Model A321-112, Approved December 20, 1995; 2.
- Model A321-131, Approved December 20, 1995;
- Model A321-211, Approved September 18, 1997;
- Model A321-231, Approved September 18, 1997:
- Model A321-212, Approved May 20, 2005;
- 7. Model A321-213, Approved May 20, 2005;
- 8. Model A321-232, Approved May 20, 2005.
- Model A321-271N, Approved December 15, 2016.
- 10. Model A321-251N Approved March 1, 2017
- 11. Model A321-253N Approved March 3, 2017
- 12. Model A321-272N Approved July 6, 2017
- 13. Model A321-252N Approved February 21, 2018
- 14. Model A321-251NX Approved March 22, 2018
- 15. Model A321-252NX Approved March 22,
- 16. Model A321-253NX Approved March 22,
- 17. Model A321-271NX Approved March 22.
- 18. Model A321-272NX Approved March 22, 2018

Model A321-111 & A321-212, Two CFMI Model CFM56-5B1 or CFM56-5B1/P or CFM56-5B1/2P or CFM56-5B1/3 jet

Model A321-112 & A321-213, Two CFMI Model CFM56-5B2 or CFM56-5B2/P or CFM56-5B2/3 jet engines;

Model A321-131 & A321-232, Two IAE Model V2530-A5 jet engines

Model A321-211, Two CFMI Model CFM56-5B3/P or CFM56-5B3/2P or CFM56-5B3/P1 or CFM56-5B3/2P1 5B3/3 or CFM56-5B3/3B1 jet engines

Model A321-231, Two IAE Model V2533-A5 jet engines

Model A321-271N, -271NX, Two IAE Model PW1133G-JM or PW1133GA-JM jet engines

Model A321-251N, -251NX; Two CFMI model LEAP 1A32 jet engines

Model A321-253N, -253NX; Two CFMI model LEAP 1A33 or LEAP 1A35 jet engines

Model A321-272N, -272NX; Two IAE Model PW1130G-JM jet engines

Model A321-252N, -252NX; Two CFMI model LEAP 1A30 jet engines

See Note 6 for description of "/P" engine models

See Notes 11 and 12 for description of "/2P" engine models

See Note 13 for description of "/3" engine models

See Note 14 for description of " "engine models (Select One Package)

See Note 19 for description of "/P1" or "/2P1" or "/3B1" engine models

Fuel:

See Installation Manual - Documents CFM 2026 or CFM 2129 or Service Bulletin 73-0001 or IAE-0043 or Service Bulletin PW1000G-1000-73-00-0002 00A930AD

A321-111/-112/-131/-211/-231/-212/-213/-232

TYPE	SPECIFICATION (NAME)					
	FRAN	CE	USA		UK	
Kerosene	DCSEA 134-D	(F-34)	ASTM D 1655	(JET A) (JET A1)	DEF STAN 91/91	(AVTUR) (JET A1)
			MIL-DTL- 83133-H	(JP 8)	DEF STAN 91/87 iss 7	(AVTUR/FSH) (JET A1) (AIA)
Wide cut			ASTM D 6615	(JET B)	DEF STAN 91/88	(AVTAG/FSH)
			MIL-DTL-5624	(JP 4)		
High flash point	DCSEA 144-C	(F-44)	MIL-DTL- 5624-V	(JP 5)	DEF STAN 91/86 iss 7	(AVCAT)

A321-271N/-272N/-251N/-252N/-253N/-271NX/-272NX/-251NX/-252NX/-253NX

TYPE	SPECIFICATION (NAME)			
	USA		τ	JK
Kerosene	ASTM D 1655	(JET A) (JET A1)	DEF STAN 91/91	(AVTUR) (JET A1)
	MIL-DTL- 83133-H	(JP 8)	DEF STAN 91/87 iss 7	(AVTUR/FSII) (JET A1) (AIA)
High flash point	MIL-DTL-5624- V	(JP 5)	DEF STAN 91/86 iss 7	(AVCAT)

Additives: See CFMI "Specific Operating Instructions," CMF TPOI-13 or Service Bulletin 73-0001 or IAE V2500 "Installation and Operating Manual" IAE-0043, 4.5 or the "Standard Practices and Processes Manual" in IETM or Service Bulletin PW1000G-1000-73-00-0002-00A-930A-D. The above mentioned fuels and additives are also suitable for the APU.

Engine Limits:

	CFMI CFM56-5B1*** or -	CFMI CFM56-5B2 or -5B2/P	CFMI CFM56-5B3/P
	5B1/P or –5B1/2P or -5B1/3	or -5B2/3	or –5B3/2P or -5B3/P1 or –
			5B3/2P1 or -5B3/3 or -
			5B3/3B1
Engine Limitation	Data Sheets	Data Sheets	Data Sheets
	E37NE E38NE (FAA)	E37NE E38NE (FAA)	E37NE E38NE (FAA)
Static Thrust at Sea Level			
- Take-off (5 min)**	13 344 daN (30,000 lb)	13 789 daN (31 000 lb)	14 234 daN (32,000 lb)
(Flat rated 30°C)			
Maximum Continuous	12 940 daN (29,090 1b)	12 940 daN (29,090 1b)	12940 daN (29,090 lb)
(Flat rated 25°C)			
Maximum Engine Speed			
- N1 rpm (%)	5,200 (104)	5,200 (104)	5,200 (104)
- N2 rpm (%)	15,183 (105)	15,183 (105)	15,183 (105)
Max Gas Temperature			
(°C)			
- Take-off (5 min)**	950	950	950
- Max Continuous	915	915	915
- Starting *	725	725	725
Max Oil Temperature			
(Supply Pump Inlet; °C)			
- Take-off, Stabilized	140	140	140
- Transient (15 min max)	155	155	155
Min. Press. (PSI)	13	13	13
Approved Oils	See SB CFMI 79-001-OX	See SB CFMI 79-001-OX	See SB CFMI 79-001-OX

	IAE V2530-A5	IAE V2533-A5	PW1133G-JM/ PW1133GA- JM
Engine Limitation	Data Sheets E40NE (FAA)	Data Sheets E40NE (FAA)	Data Sheet E0087EN (FAA)
Static Thrust at Sea Level			
- Take-off (5 min)**	13 300 daN (29,900 lb)	14 055 daN (31,600 lb)	14 728 daN (33,110lb)
(Flat rated 30°C)			· · ·
Maximum Continuous	11 988 daN (26,950 1b)	11 988 daN (26,950 lb)	14 581 daN (32,780lb)
(Flat rated 25°C)			
Maximum Engine Speed			
- N1 rpm (%)	5,650 (100)	5,650 (100)	10,047(105)
- N2 rpm (%)	14,950 (100)	14,950 (100)	22300(105)
Max Gas Temperature	Eng. Limit/ ECAM	Eng. Limit/ ECAM	
(°C)			
- Take-off (5 min)**	650/650	670/650	1083
- Max Continuous	610/610	610/610	1043

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	IAE V2530-A5	IAE V2533-A5	PW1133G-JM/ PW1133GA- JM
Engine Limitation	Data Sheets E40NE (FAA)	Data Sheets E40NE (FAA)	Data Sheet E0087EN (FAA)
- Starting *	635/635	635/635	1083
Max Oil Temperature			
(Supply Pump Inlet; °C)			
- Take-off, Stabilized	155	155	152
- Transient (15 min max)	165	165	141
Min. Press. (PSI)	60	60	63
Approved Oils	See Doc IAE 0043 Sec 4.9	See Doc IAE 0043 Sec 4.9	See SB
	(MIL-L-23699)	(MIL-L-23699)	PW1000G-1000-79-00-0002-
			00A-930A-D

Engine Limits Continued:

Engine Limits Continued:			
	CFMI LEAP-1A32	CFMI LEAP-1A33/-1A35A	CFMI LEAP-1A30
Engine Limitation	Data Sheet E00089EN (FAA)	Data Sheet E00089EN (FAA)	Data Sheet E00089EN (FAA)
Static Thrust at Sea			
Level			
- Take-off (5 min)**	14 305 daN (32,160lb)	14 305 daN (32,160lb)	14 305 daN (32,160lb)
(Flat rated 30°C)			
Maximum Continuous	14 096 daN (31,690lb)	14 096 daN (31,690lb)	14 096 daN (31,690lb)
(Flat rated 25°C)			
Maximum Engine Speed			
- N1 rpm (%)	3,894(101.0)	3,894(101.0)	3,894(101.0)
- N2 rpm (%)	19,391(116.5)	19,391(116.5)	19,391(116.5)
Max Gas Temperature			
(°C)			
- Take-off (5 min)**	1060	1060	1060
- Max Continuous	1025	1025	1025
- Starting (ground)	750	750	750
Max Oil Temperature			
(Supply Pump Inlet; °C)			
- Take-off, Stabilized	140	140	140
- Transient (15 min max)	155	155	155
Min. Press. (PSI)	29 redline/17.4 idle	29redline/17.4 idle	29redline/17.4 idle
Approved Oils	See SB 79-0001	See SB 79-0001	See SB 79-0001

^{* 4} Consecutive cycles of 2 minutes each.

<u>Airspeed Limits (Indicated Airspeed - IAS - Unless otherwise Stated:</u>

Maximum Operating Mach
 Maximum Operating Speed
 VMO: 0.82
 VMO: 350 kt

- Maneuvering Speed VA: - See the Limitations Section of Aircraft Flight Manual

- Extended Flaps/Slats Speed - VFE

For A321-111/-112/-131/-211/-212/-213/-231/-232 the following table applies:

Configuration	Slats/Flaps	VFE (Kt)	
1	18/0	230**	Intermediate Approach
	18/10	215**	Take-off
2	22/14	205	Take-off and Approach
		215*	
3	22/21	195	Take-off, Approach, and
			Landing

^{**10} minutes at take-off thrust allowed only in case of engine failure (at take-off or during go-around)

^{***} See Note 18 for engine models no longer in production/service

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Fu11	27/25	190	Landing
Full	21/23	190	Landing

^{*} See Note 4

For A321-271N/-272N/-251N/-252N/-253N the following table applies:

	Slats/Flaps		
Configuration	(°)	VFE (kt)	
1	18/0	238/243*	Intermediate approach
	18/10	225	Take-off
2	22/14	215	Take-off and approach
3	22/21	195	Take-off, approach, landing
Full	27/34	186	Landing

^{*}For A321-251NX,-252NX,-253NX,-271NX,-272NX

Landing Gear:

- VLE - Extended: 280 Kt/Mach 0.67

- VLO - Extension: 250 kt - Retraction: 220 kt

Tire Limit Speed (Ground Speed) = 195.5 kt (225 mph)

Maximum Weights:

A321-100:

VARIANT	000 BASIC	002 Mod 24178	003 Mod 24899
	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)
Max. Take-off Weight	83 000 182 983	83 000 182 983	85 000 187 391
Max. Landing Weight	73 500 162 040	74 500 164 243	74 500 164 243
Max. Zero Fuel Weight	69 500 153 220	70 500 155 424	70 500 155 424

A321-211 & 231:

VARIANT	000 BASIC	001 Mod 28960	002 Mod 28721	011 Mod 32456
	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)
Max. Take-off Weight	89 000 196 210	93 000 205 027	89 000 196 208	93 500 206 132
Max. Landing Weight	75 500 166 448	77 800 171 517	77 800 171 517	77 800 171 517
Max. Zero Fuel Weight	71 500 157 629	73 800 162 699	73 800 162 699	73 800 162 699

A321-212, 213 & 232:

	000	002	007	011
VARIANT	BASIC	Mod 28721	Mod 31617	Mod 32456
	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)
Max. Take-off Weight	89 000 196 210	89 000 196 208	83,000 182 983	93 500 206 132
Max. Landing Weight	75 500 166 448	77 800 171 517	73,500 162 040	77 800 171 517
Max. Zero Fuel Weight	71 500 157 629	73 800 162 699	69,500 153 220	73 800 162 699

A321-251N, 252N, 253N, & 271N, 272N:

	50	51	52	53
VARIANT	Mod 161448	Mod 161555	Mod 161556	Mod 161557
	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)
Max. Take-off Weight	89 000 196 210	89 000 196 210	93 500 206 132	93 500 206 132
Max. Landing Weight	77 300 170 417	79 200 174 606	77 300 170 417	79 200 174 606
Max. Zero Fuel Weight	73 300 161 598	75 600 166 669	73 300 161 598	75 600 166 669

^{**} See Note 10

	56	63	65	70
VARIANT	MOD 158238	MOD 158245	MOD 158247	Mod 161735
	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)
Max. Take-off Weight	92 500 203 928	91 000 200 621	90 500 199 518	80 000 176 369
Max. Landing Weight	77 300 170 417	79 200 174 606	79 200 174 606	71 500 157 630
Max. Zero Fuel Weight	73 300 161 598	75 600 166 669	75 600 166 669	67 000 147 709

A321-251NX, 252NX, 253NX, & 271NX, 272NX

VARIANT	50 BASIC	51	52	53
	MOD 161448	MOD 161555	MOD 161556	MOD 161557
	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)
Max. Take-off Weight	89 000 196 210	89 000 196 210	93 500 206 132	93 500 206 132
Max. Landing Weight	77 300 170 417	79 200 174 606	77 300 170 417	79 200 174 606
Max. Zero Fuel	73 300 161 598	75 600 166 669	73 300 161 598	75 600 166 669
Weight				

VARIANT	56	63	65	70
	MOD 158238	MOD 158245	MOD 158247	Mod 161735
	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)
Max. Take-off Weight	92 500 203 928	91 000 200 621	90 500 199 518	80 000 176 369
Max. Landing Weight	77 300 170 417	79 200 174 606	79 200 174 606	71 500 157 630
Max. Zero Fuel Weight	73 300 161 598	75 600 166 669	75 600 166 669	67 000 147 709

VARIANT	71	72	80
	MOD 160287	MOD 160288	MOD 161729
	(KG) (LBS)	(KG) (LBS)	(KG) (LBS)
Max. Take-off Weight	97 000 213 848	97 000 213,848	95 000 209 439
Max. Landing Weight	77 300 170 417	79,200 174,606	79 200 174 606
Max. Zero Fuel Weight	73 300 161 598	75 600 166,669	75 600 166 669

Minimum Weight:

VARIANT	A321-111/-112/-131/-211/- 231/-212/-213/-232			'1N/-272N NX/-272NX		-252N/-253N 252NX/-253NX
	(KG)	(LBS)	(KG)	(LBS)	(KG)	(LBS)
Minimum Weight	47 500	104 718	46 300	102 075	46 600	102 736

Minimum Crew:

2 Pilots

Maximum Passengers:

A321-111/-112/-131/-211/-231/-212/-213/-232/-271N/-272N/-251N/-252N/-253N 220

see note 20 and 24

A321-251NX/-252NX/-253NX/-271NX/-272NX 244

Maximum Baggage:

A321-111/-112/-131/-211/-231/-212/-213/-232/-271N/-272N/-251N/-252N/-253N

CARGO COMPARTMENT	MAXIMUM LOAD	
	(KG) (LBS)	
Forward	5,670 12,500	
Aft	5,670 12,500	
Rear (Bulk)	1,497 3,300	

A321-251NX/-252NX/-253NX/--271NX/-272NX

CARGO COMPARTMENT	MAXIMUM LOAD	
	(KG) (LBS)	
Forward	5,670 12,500	
Aft	5,670 12,500	
Rear (Bulk)	800 1,764	

For the positions and the loading conditions authorized in each position (references of containers, pallets, and associated weights), see Weight and Balance Manual, ref. 00E080A0001/C1S Chapter 1.10.

<u>Fuel Capacity (0.8 kg/liter):</u> A321-111/-112/-131/-211/-231/-212/-213/-232:

3-Tank Airplane				
Tank	Usab	le Fuel	Unusable Fuel	
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
Wing	15,500 (12,400)	4,094 (27,331)	22.6 (18)	6 (39.6)
Center	8,200 (6,560)	2,166 (14,460)	23.2 (18.6)	6.1 (40.97)
TOTAL	23,700 (18,960)	6,260 (41,791)	45.8 (36.6)	12.1 (80.62)

A321-200

		4-Tank Airplane (high p	ressure ACT system) (*)		
Tank	Usab	Usable Fuel		Unusable Fuel	
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)	
Wing	15,500	4,094	22.6	6	
	(12,400)	(27,331)	(18)	(39.6)	
Center	8,200	2,166	23.2	6.1	
	(6,560)	(14,460)	(18.6)	(40.97)	
ACT	2,900	766	17	4.5	
	(2,320)	(5,114)	(13.6)	(29.96)	
TOTAL	26,600	7,026	62.8	16.6	
	(21,280)	(46,905)	(50.2)	(110.58)	

(*) see note 7

		4 to 5-Tank Airplane (low pressure ACT sys		
Tank	Usab	le Fuel	Unusable Fuel	
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
TOTAL				
3-Tank	23,700	6,260	45.8	12.1
Airplane	(18,960)	(41,791)	(36.6)	(80.62)
ACT 1	2,992 (2,393)	790 (5,274)	17 (13.6)	4.5 (29.96)
TOTAL				
4-Tank	26,692	7,050	62.8	16.6
Airplane	(21,353)	(47,065)	(50.2)	(110.58)

ACT 2	2,992 (2,393)	790 (5,274)	17 (13.6)	4.5 (29.96)
TOTAL				
5-Tank	29,684	7,840	79.8	21.1
Airplane	(23,746)	(52,339)	(63.8)	(140.54)

(**) See note 9

$\underline{A321\text{-}271N/\text{-}272N/\text{-}251N/\text{-}252N/\text{-}253N}}$

		3-Tank Airplane			
Tank	Usab	le Fuel	Unusable Fuel		
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)	
Wing	15,380	4063	22.6	6	
	(12,073)	(26,616)	(18)	(39.6)	
Center	8,200	2,166	23.2	6.1	
	(6,437)	(14,189)	(18.6)	(40.97)	
TOTAL	23,580	6,229	45.8	12.1	
	(18,510)	(40,805)	(36.6)	(80.62)	

A321-271N/-251N/-252N/-253N/-272N

		4 to 5-Tank Airplane (low pressure ACT sys		
Tank	Usabl	le Fuel	Unusable Fuel	
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
TOTAL				
3-Tank	23,580	6,229	45.8	12.1
Airplane	(18,510)	(40,805)	(36.6)	(80.62)
ACT 1	2,992 (2,393)	790 (5,274)	17 (13.6)	4.5 (29.96)
TOTAL	, , ,		, ,	, ,
4-Tank	26,572	7,019	62.8	16.6
Airplane	(20,903)	(46,079)	(50.2)	(110.58)
ACT 2	2,992 (2,393)	790 (5,274)	17 (13.6)	4.5 (29.96)
TOTAL				
5-Tank	29,564	7,809	79.8	21.1
Airplane	(23,296)	(51,353)	(63.8)	(140.54)

A321-271NX/-272NX/-251NX/-252NX/-253NX

		3-Tank	Airplane	
Tank	Usab	Usable Fuel		ole Fuel
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
Wing	15,380 (12,073)	4063 (26,616)	22.6 (18)	6 (39.6)
Center	8,200	2,166	23.2	6.1
	(6,437)	(14,189)	(18.6)	(40.97)
TOTAL	23,580	6,229	45.8	12.1
	(18,510)	(40,805)	(36.6)	(80.62)

4 to 6-Tank Airplane					
Tank	Usable Fuel Unusable Fuel				
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)	
TOTAL					
3-Tank	23,580	6,229	45.8	12.1	
Airplane	(18,510)	(40,805)	(36.6)	(80.62)	
•					

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4 to 6-Tank Airplane				
Tank	Usab	le Fuel	Unusable Fuel	
	Liters (kgs)	Gallons (lbs)	Liters (Kgs)	Gallons (lbs)
ACT AFT 1	2,992	790	17	4.5
	(2,393)	(5,274)	(13.6)	(29.96)
TOTAL				
4-Tank	26,572	7,019	62.8	16.6
Airplane	(20,903)	(46,079)	(50.2)	(110.58)
ACT AFT 2	2,992	790	17	4.5
110111112	(2,393)	(5,274)	(13.6)	(29.96)
TOTAL				
5-Tank	29,564	7,809	79.8	21.1
Airplane	(23,296)	(51,353)	(63.8)	(140.54)
ACT FWD	2,992	790	17	4.5
	(2,393)	(5,274)	(13.6)	(29.96)
TOTAL				
6-Tank	29,564	7,809	96.8	25.6
Airplane	(23,296)	(51,353)	(77.4)	(170.50)

Oil Capacity:

CFMI CFM56-5B - Engine Oil Capacity, 10 quarts/engine (9.46 liters).

IAE V2500-A5 - Engine Oil Capacity, 7 quarts/engine (6.6 liters)

IAE PW1100G-JM – Engine Oil Capacity 34.9 quarts/engine (33.0 liters)

CFMI LEAP-1A – Engine Oil Capacity 21,3 quarts/engine (20,1 liters)

Maximum Operating Altitude:

- 39,800 feet (12,200 m) clean if modification 30748 is embodied.
- 39,100 feet (12,000 m) clean.
- 20,000 feet (6,500 m) Slats/Flaps extended.

Equipment:

The basic equipment as prescribed in the airworthiness regulations (see certification basis) must be installed in the aircraft for certification. Equipment approved for installation are listed in the definition of the reference model and the modification applicable to it. Refer to Type Certification Standard Equipment Schedule Lists:

- 00E000A0007/C1S for A321-111 Model
- 00E000A0006/C1S for A321-112 Model
- 00E000A0004/COS for A321-131 Model
- 00E000A0211/COS for A321-211 Model
- 00E000A0231/COS for A321-231 Model
- 00E000A0212/C0S for A321-212 Model
- 00E000A0213/C0S for A321-213 Model
- 00E000A0232/C0S for A321-232 Model

Refer to Note 1 for list of A321 airplane model FAA Type Definitions.

Serial Numbers Eligible:

Until September 26, 2004, A321 aircraft, all series, all models, have been produced in Hamburg (Germany) under approval LBA.G.0009 or I-A9 issued by LBA to Airbus.

From September 27, 2004 until July 20, 2008, A321 aircraft, all series, all models, have been produced in Hamburg (Germany) under approval DE.21G.0009 issued by LBA to Airbus.

Since July 21, 2008, A321 aircraft, all series, all models, are produced in Hamburg (Germany) under approval EASA.21G.0001 issued by EASA to Airbus.

Since March 8, 2016, A321 aircraft, all series, all models, are produced in Hamburg (Germany) or Mobile (USA) under approval EASA.21.G.0001 issued by EASA to Airbus.

Since February 3, 2017, A321 aircraft, all series, all models, are produced in Hamburg (Germany) or Mobile (USA) and delivered from Hamburg (Germany), Blagnac (France) or Mobile (USA) under approval EASA.21.G.0001 issued by EASA to Airbus.

Until July 20, 2008, A German Export Certificate of Airworthiness endorsed as noted under "Import Requirement", must be submitted for each individual aircraft for which application for U.S. certification is made.

Since July 21, 2008, a EASA Export Certificate of Airworthiness endorsed as noted under "Import Requirement", must be submitted for each individual aircraft for which application for U.S. certification is made.

Import Requirements:

A FAA Standard Airworthiness Certificate may be issued based on a German Export Certificate of Airworthiness (Export C of A), signed by a representative of the Luftfahrt-Bundesamt (LBA) of Germany on behalf of the European Community or based on a EASA Export C of A issued by a representative of EASA. The Export C of A should contain the following statement: "The aircraft covered by this certificate has been examined, tested, and found to conform to the Type Design approved under FAA Type Certificate No. A28NM and to be in a condition for safe operation."

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, Airworthiness Certification of Aircraft, for requirements for issuance of an airworthiness certificate for imported aircraft."

Certification Basis (A321-100 and A321-200)

- a. Part 25 of the FAR effective February 1, 1965, including amendments 25-1 through 25-56 thereto.
- a.1. Plus the following sections of Part 25 as amended by amendments 25-1 through:
 - 25-58 (Section 25.812(e))
 - 25-63 (Section 25.25(a)(3))
 - 25-67 (Section 25.807(c)(7))
 - 25-70 (Section 25.1411(a)(2))

(Applied per FAA derivative aircraft policy – reference FAA order 8110.4A)

- a.2. Airbus elected to comply with portions of FAR 25.562, Amendment 64, for the passenger seats only. FAR paragraphs 25.562(c)(5) and 25.562(c)(6) do not apply.
- b. Based on 14 CFR Section 21.29(a) for new import Type Certificates (TCs), (or Section 21.101(g) for changes to TCs), applicable provisions of 14 CFR Part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.
- c. 14 CFR Part 34 of the FAR effective September 10, 1960, including amendments 34-1.
- d. 14 CFR Part 36 of the FAR effective December 1, 1965, including amendments 36-1 through 36-20 thereto. See Note 17. 14 CFR Part 36 through Amendment 36-31, Stage 5 for models; A321-251N, A321-252N, A321-253N, A321-271N, and A321-272N. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.
- e. FAA Special Conditions issued for the A320 in accordance with Section 21.16 of the FAR:
 - (1) No. 25-ANM-23, Effective December 15, 1988:
 - Electronic Flight Controls
 - Active Controls
 - Engine Controls and Monitoring
 - Protection from Lightning and Unwanted Effects of Radio Frequency (RF) Energy
 - Flight Characteristics
 - Flight Envelope Protection
 - Side Stick Controllers
 - Flight Recorder.
 - (2) No. 25-ANM-29, Effective May 31, 1989:
 - Computerized Airplane Flight Manual
 - (3) No. 25-671-SC, Effective May 16, 2017:

- Non-Rechargeable Lithium Batteries Applicable to Type design changes applied after May 16, 2017.
 Reference the applicability section of this special condition for more information on which Type design changes must meet it.
- (4) No. 25-729-SC, Effective June 28, 2018:
 - Electronic System Security Protection from Unauthorized Internal Access Applicable to type design changes applied after June 28, 2018.
- (5) No. 25-730-SC, Effective June 28, 2018:
 - Electronice System Security Protection from Unauthorized External Access Applicable to type design changes applied after June 28, 2018.
- f. For precision approach and landing, the applicable technical requirements are complemented by AC 120-29 and AC 120-28c.

For the automatic flight control system, the applicable technical requirements are complemented by AC 20-57A for automatic landing and by AC 25.1329-1A for cruise.

Use of JAR AWO where applicable to the requirements above, is acceptable.

- g. The following sections of the FAR have been complied with through equivalent safety demonstrations in addition to the equivalent safety findings applicable from the original A320 certification basis:
 - 25.101, 25.105, 25.109, 25.113, 25.115, 25.735, for rejected take-off and landing performance
 - 25.305, 25.331, 25.333, 25.335, 25.341, 25.345, 25.349, 25.351, 25.371, 25.373, 25.391, 25.427, for design gust criteria
 - -25.783(e) bulk cargo door
 - 25.783(f) for passenger doors
 - 25.807(c) for maximum passenger capacity
 - 25.933(a) for thrust reversing system.
- h. Optional requirements elected:
 - 25.801 for ditching.
 - 25.1419 for icing.

Certification Basis for Airbus Model A321 series airplanes with modification 160023 installation of large wingtip device (Sharklet):

The original certification basis for the Model A321 shown above for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-129 (i.e., the amendment in affect on the date of application April 8, 2010) applied to the components and areas affected by the change:

25.23, 25.25, 25.101, 25.109, 25.113, 25.115, 25.117, 25.161, 25.171, 25.173, 25.203, 25.235, 25.251, 25.301, 25.303, 25.305, 25.307(a)(d), 25.321, 25.331, 25.333, 25.335, 25.337, 25.341(a)(b), 25.343, 25.345, 25.349, 25.351, 25.365(a)(b)(d), 25.367, 25.371, 25.373, 25.391, 25.393(b), 25.427, 25.445, 25.457, 25.459, 25.471(a)(b), 25.473, 25.479(a)(c)(d), 25.481(a)(c), 25.483, 25.485, 25.489, 25.581, 25.601, 25.603, 25.605, 25.607, 25.609, 25.613, 25.619, 25.623, 25.625, 25.629, 25.631, 25.651, 25.671, 25.672, 25.683(b), 25.903(d)(1), 25.1011(b), 25.1385(a)(b)(d), 25.1387(a)(b)(c)(d), 25.1389, 25.1391, 25.1393, 25.1395, 25.1397, 25.1401, 25.1505, 25.1511, 25.1515, 25.1517, 25.1527, 25.1533, 25.1535, 25.1581, 25.1585(a)

Plus the following sections of 14 CFR part 25 amended as indicated below applied to the components and areas affected by the change per Airbus reversion justification:

25.21 Amdt 120 ¹	25.181 Amdt 107 ²
25.103 Amdt 107 ^{1&2}	25.201 Amdt 107 ²
25.105 Amdt 120 ¹	25.207 Amdt 107 ^{1&2}
25.107 Amdt 107 ^{1&2}	25.231 Amdt 107 ²
25.111 Amdt 120 ¹	25.233 Amdt 107 ²
25.119 Amdt 107 ^{1&2}	25.237 Amdt 107 ^{1&2}
25.121 Amdt 107 ^{1&2}	25.253 Amdt 120 ¹
25.123 Amdt 120 ¹	25.571(a)(b)(e) Amdt 86 ³

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25.125 Amdt 107 ^{1&2}	25.981 Amdt 56 ⁴
25.143 except (g) Amdt 107 ^{1&2}	25.1001 Amdt 107 ¹
25.143(g) at Amdt 108 ¹	25.1301 Amdt 56 ⁵
25.145 Amdt 97 ^{1&2}	25.1309 Amdt 56 ⁵
25.147 Amdt 107 ²	25,1419 Amdt 56 ¹
25.149 Amdt 107 ²	25.1587 Amdt 107 ¹
25.175 Amdt 107 ²	

Notes:

- 1. FAA acceptance of these reversions was based on the fact that Airbus has done additional testing above the requirements incorporated by reference as documented in EASA AMC-F14, dated November 29, 1993, Flight in Icing Conditions, and a determination that compliance with the amendment in effect on the date of application for these rules (i.e., Amendment 25-121) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3). EASA AMC-F14 is incorporeated as part of certification basis for this airplane.
- 2. FAA acceptance of these reversions was based on fact that Airbus will show compliance with FAA Special Condtion 25-ANM-23 for V_{SR} and a determination that compliance with the amendment in effect on the date of application for these rules (i.e., Amendment 25-108) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).
- 3. FAA acceptance of this reversion was based on a determination that compliance with the amendment in affect on the dated of application for this rule (i.e., Amendment 25-96) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).
- 4. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-102) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).
- 5. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety exception of 14 CFR 21.101(b)(3).

Plus the following sections of part 25 amended as indicated below based on Airbus elect to comply:

25.107(e)(1)(iv) Amendment 25-135 25.177 Amendment 25-135

Special conditions:

The FAA Special Conditions applicable to each model as defined above remain applicable to aircraft equipped with Sharklet, except Paragraph 2 – Active Controls of FAA Special Condition 25-ANM-23 is replaced with the following special conditions:

- No. 25-469-SC Effective October 11, 2012 "Interaction of Systems and Structures"
- No. 25-470-SC Effective October 11, 2012 "Design Dive Speed"
- No. 25-471-SC Effective October 11, 2012 "Design Roll Maneuver Conditions"

Equivalent Safety Findings (ESFs):

The original ESFs applicable to each model as defined above remain effective for aircraft equipped with Sharklet plus the following ESF for aircraft equipped with Sharklet:

25.331 – Use of EASA Certification Specification (CS) 25.331 in lieu of 14 CFR 25.331 for checked pitch maneuver (reference ELOS memorandum TD000885IB-T-A-5)

25.1419 – Analysis instead of flight testing in natural icing conditions (reference ELOS memorandum TD00885IB-T-SE-1)

Noise standards

14 CFR 21.93(b) - No acoustical change

Fuel venting and exhaust emissions standards

Not affected by the change. The initial requirements remain applicable.

Optional Requirements elected

25.801 for ditching.

- 25.1419 for icing.
- 25.1535 for ETOPS

Part 26

14 CFR part 26 effective December 10, 2007, including Amendments 26-1 through 26-3.

Certification basis for the Airbus Model A321-211, -212, -213, -231 and -232 installed with large wingtip device (Sharklet Modification 160023) and Modification 157272(Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 230 passengers:

The original certification basis for the Model A321-211, -212, -213, -231 and -232 installed with large wingtip device (Sharklet Modification 160023) plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-139 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	139	Fuselage Structure
25.321	139	Fuselage Structure
25.331	139	Fuselage Structure
25.341(a)(b)	139	Fuselage Structure
25.351	139	Fuselage Structure
25.473	139	Fuselage Structure
25.479(a)(c)(d)	139	Fuselage Structure
25.481(a)(c)	139	Fuselage Structure
25.489	139	Fuselage Structure
25.801(d)	139	Entire Airplane
25.803(c)	139	Cabin Interior
25.807	139	Cabin Interior
25.810	139	Cabin Interior
25.811	139	Cabin Interior
25.813	139	Cabin Interior
25.815	139	Cabin Interior
25.1447(c)(1)	139	Passenger equipment associated with increased MPSC
25.1519	139	Entire Airplane
25.1529	139	ICA associated with increased MPSC
25.1541(a)(b)	139	Marking & Placards associated with increased MPSC
25.1557(a)	139	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-139 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment
	Level
25.305(a)(b),25.307(a),25.365(a)	129
25.562	64
25.571(a)(b)	86
25.561,25.785,25.787(a)(b), 25.789(a), 25.791, 25.809, 25.812(e)(k)(l),	
25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g)(e),	56

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25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	
25.853(c)(d)(e)	116

Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification 157272 (MaxPax):

AT10407IB-T-CS-2

§ 25.807 Emergency Exits

Finding for Increase of the Maximum Passenger Capacity (MPSC) from 220 passengers to 230 passengers

Optional Design Regulations:

ETOPS:

Model A321-211, -212, -213, -231 and -232 airplanes installed with large wingtip device (Sharklet Modification 160023) and 157272 (MaxPax) have not been evaluated for extended operations (ETOPS) type design approval.

Part 26:

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width, starting at the aircraft aisle centerline and extending 21 inches outboard from the aircraft aisle centerline, must be a minimum of 23.2 inches. Any attendant seat/fixture installed on the side of the exit passageway must not result in a passageway less than 23.2 inches for the inboard portion of the passageway. The remaining passageway (starting 21 inches from the aircraft centerline to the emergency exit) must be a minimum of 20 inches. The height of the attendant seat/fixture is limited to a maximum height of 56.5 inches.
- The unobstructed exit dimensions of the floor level emergency exits must not be less than 32 inches x 73 inches.
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at doors 1 and 4.
- The wide slides installed at doors 1 and 4 must have a beam strength meeting the requirements of TSO C69c

Certification basis for the Airbus Model A321-271N/-272N/-251N/-252N/-253N (Single Aisle New Engine Option):

The certification basis for the Airbus Model A321 series airplanes with Modification 160023 - installation of large wingtip device (Sharklet) for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-136 (i.e., the amendment in affect on the date of application) applied to the components and areas affected by the change:

25.3, 25.23(a)(b), 25.25(a)(b), 25.27, 25.101, 25.107(e)(1)(iv), 25.109, 25.113, 25.115, 25.117, 25.147, 25.149, 25.161, 25.171, 25.173, 25.175, 25.177, 25.181, 25.201, 25.203, 25.231, 25.233, 25.235, 25.251(a)(b)(c)(d)(e), 25.253(a)(b), 25.255, 25.301*, 25.303*, 25.305(a)(b)(c)*, 25.307(a)(d)*, 25.321(a)(b)(c)(d), 25.331(a)(b)(c), 25.333(a)(b),25.335(a)(b)(c)(d)(e)(f), 25.337, 25.341(a)(b), 25.343(a)(b), 25.345(a)(b)(d), 25.349(a)(b), 25.351, 25.361, 25.363, $25.365(a)(b)(c)(d)(e)^*$, 25.367(a)(b), 25.371, 25.373, 25.391(a)(b)(c)(d)(e), 25.427(a)(b)(c)(d), 25.445(a)(b), 25.457, 25.459, 25.471(a)(b), 25.473, 25.479(a)(c)(d), 25.481(a)(c), 25.483, 25.485(a)(b), 25.489, 25.491, 25.493(b)(c)(d), 25.495, 25.499(a)(b)(c)(d)(e), 25.503(a)(b), 25.507(a)(b)(c), 25.509(a)(c)(d), 25.511, 25.519(a)(b)(c), 25.563, 25.581, 25.601*, 25.603, 25.605, 25.607, 25.609*, 25.613, 25.619*, 25.623*, 25.625, 25.629, 25.631*, 25.651*, 25.671, 25.672(a)(b)(c), 25.683(b), 25.703(a)(b)(c), 25.721(a)(b)(c), 25.777, 25.779(b), 25.789, 25.801, 25.841(a), 25.843(b), 25.851(b), 25.855(c), 25.863 (a)(b)(c)(d), 25.865, 25.867(a)(b)*, 25.869(a)(b)(c), 25.901(a)(b)(c), 25.903, 25.904, 25.933(a), 25.934, 25.939 (a)(c), 25.943, 25.951(a)(b)(c)(d)*, 25.952(a)(b), 25.954, 25.955(a), 25.959, 25.961, 25.963(a)(d), 25.969, 25.971, 25.975, 25.981 except 25.981(a)(3)**, 25.993(a)(b)(c)(d)(e), 25.994, 25.995, 25.997(a)(b)(c)(d), 25.999(a)(b), 25.1001, 25.1011(a)(b), 25.1013(a)(b)(c)(d)(e)(f), 25.1015(a)(b), 25.1017(a)(b), 25.1017(a25.1019(a), 25.1021(a)(b), 25.1023(a)(b), 25.1025(a)(c), 25.1041, 25.1043(a)(b)(c), 25.1045(a)(b)(c), 25.1091(a)(b)(c)(d)(e), 25.1093(b), 25.1103(b)(c)(d), 25.1121, 25.1123, 25.1141, 25.1143, 25.1145, 25.1155, 25.1163, 25.1165, 25.1167, 25.1181, 25.1182, 25.1183, 25.1185, 25.1187, 25.1189, 25.1191, 25.1193, 25.1195, 25.1197,

 $25.1199, 25.1201, 25.1203, 25.1207, 25.1301*, 25.1305, 25.1309*, 25.1316, 25.1317, 25.1337, 25.1353(a)(b)*, \\ 25.1355(c), 25.1357(a)*, 25.1363, 25.1401(b), 25.1403, 25.1431*, 25.1438, 25.1461, 25.1501, 25.1503, 25.1507, \\ 25.1511, 25.1513, 25.1515, 25.1517, 25.1519, 25.1521(a)(c)(d), 25.1525, 25.1527, 25.1529, 25.1531, 25.1533, \\ 25.1535*, 25.1549(a)(b)(c), 25.1553, 25.1581, 25.1583, 25.1585, 25.1587, 25.1591, 25.1701(a)*, 25.1703(a)(b)(d)*, \\ 25.1705*, 25.1707*, 25.1709*, 25.1711*, 25.1713*, 25.1715*, 25.1717*, 25.1719*, 25.1723*, 25.1725*, 25.1727*, \\ 25.1731*$

- * For new and modified parts only (engine, pylon, nacelle, bleed air system, wing structural changes in area of pylon and landing gear reinforcement)
- ** FAA acceptance of this exception is for the Fuel Quanty Indicating System (FQIS) and Fuel Level Sensor System (FLSS) wiring installation changes and fuel tank structural fastener changes only and is based on the following design features incorporated on the NEO: The FQIS/FLSS wiring is within the S-routes in pressurized areas and is isolated with protective textile sleeving with CAUTION, FUEL TANK HARNESS ONLY" labels. The FQIS/FLSS wiring is within the S-routes in non-pressurized areas and is isolated with protective heat shrink sleeving and routed with the rest of the S-route bundle in PTFE conduit up to fuel tank walls penetration with "CAUTION, FUEL TANK HARNESS INSIDE" labels. Wiring production breaks from Avionic bays to the the tank walls is done through dedicated connectors. The fuel tank structural fastener changes meet the criteria for the use of exceptions in FAA policy ANM-112-08-002 "Policy on Issuance of Special Conditions and Exemptions Related to Lightning Protection of Fuel Tank Structure," dated May 26, 2009.

Plus the following sections of 14 CFR part 25 amended as indicated below applied to the components and areas affected by the change per Airbus reversion justification:

25.21 Amdt. 120 ¹	25.561(a)(b)(c)(d) Amdt. 64 ²
25.103 Amdt. 120 ¹	25.571(a)(b)(e)(1) Amdt. 86 ³
25.105 Amdt. 120 ¹	25.611 Amdt. 56 ⁴
25.107 (except (e)(1)(iv)) Amdt 120 ¹	25.677(b) Amdt. 56 ⁵
25.111 Amdt. 120 ¹	25.899 Amdt. 56 ⁶
25.119 Amdt. 120 ¹	25.1317 Amdt. 56 ⁷
25.121 Amdt. 120 ¹	25.1322 Amdt. 56 ⁸
25.123 Amdt. 120 ¹	25.1329 Amdt. 56 ⁹
25.125 Amdt. 120 ¹	25.1351 Amdt. 56 ¹⁰
25.143 Amdt. 120 ¹	25.1419 Amdt. 120 ¹
25.145 Amdt. 97 ¹	25.1435 Amdt. 56 ¹¹
25.207 Amdt. 120 ¹	25.1459(a) Amdt. 56 ¹²
25.237 Amdt. 120 ¹	Appendix H at amdt 56 ¹³
25.253(c) Amdt. 120 ¹	

Notes

- 1. FAA acceptance of these reversions was based on the fact that Airbus has done additional testing above the requirements incorporated by reference as documented in the summary of EASA CRI B-06, issue 2, dated April 11, 2013, Flight in Icing Conditions, and a determination that compliance with the amendment in effect on the date of application for these rules (i.e., Amendment 25-121) would not materially increase the level of safety exception, or in some cases, would be impractical in accordance with 14 CFR 21.101(b)(3). EASA CRI B-06 is incorporated as part of certification basis for this airplane.
- 2. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-91) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 3. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-132) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 4. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).

- 5. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-115) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 6. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 7. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-122) would not materially increase the level of safety above Special Condition 25-ANM-23 in accordance with 14 CFR 21.101(b)(3).
- 8. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-131) would be impractical in accordance with 14 CFR 21.101(b)(3).
- 9. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-119) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 10. FAA acceptance of this reversion was based on a determination that the changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-72) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 11. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-104) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 12. FAA acceptance of this reversion was based on a determination that changes in this area are considered secondary and compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-124) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).
- 13. FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-123) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).

Plus the following sections of 14 CFR part 25 amended as indicated below per Airbus elect to comply:

25.853(a)(1) at Amendment 25-66 25.853(c) at Amendment 25-59

Special conditions:

FAA Special Condition 25-ANM-23 applicable to each model as defined in FAA TCDS A28NM remains applicable, except:

Paragraph 2 – Active Controls is replaced with the following special conditions:

- No. 25-469-SC Effective October 11, 2012 "Interaction of Systems and Structures"
- No. 25-470-SC Effective October 11, 2012 "Design Dive Speed"
- No. 25-471-SC Effective October 11, 2012 "Design Roll Maneuver Conditions"

Paragraph 4 – Protection from Lightning and Unwanted Effects of Radio Frequency is replaced with the following later requirements:

- 25.1316 thru amendment 25-136
- 25.1317 thru amendment 25-136

In addition the following FAA Special Condition applies specifically to the Airbus SA NEO program:

• No. 25-582-SC Effective April 30, 2015- "Transient Engine Failure Loads"

Equivalent Safety Findings (ESFs):

The ESFs applicable to each model as defined in FAA TCDS A28NM remain applicable plus the following ESFs applied specifically to the Airbus SA NEO program:

ELOS Memo	Regulation	Subject
AT00949IB-T-P-10	25.779(b)(1)	Throttle Motion During Reduced (Flexible) Takeoff Thrust Operations and/or Go-Around
AT00949IB-T-P-11	25.1549(a), (b) and (c)	Digital Display of High Pressure Rotor Speed (N2)
AT00949IB-T-P-12	25.1549(a)	Oil Temperature Indication
AT00949IB-T-P-14	25.1193(e)(3)	Resistance to Fire of Cowling
AT00949IB-T-P-15	25.1181(a)(6) & (b), & 25.1195 thru 25.1203	Fan Zone Non-fire Zone (PW only)
AT00949IB-T-P-17	25.933(a)(1)(ii)	Flight Critical Thrust Reverser
AT00949IB-T-P-19	25.934	Thrust Reverser Testing
AT00949IB-T-P-21	25.1181(a)(6) &	PW1100G-JM 2.5 Bleed & Track lock Areas and PW1100G-JM and
	(b), 25.1182 and 25.1195 through 25.1203	LEAP-1A Areas Adjacent to Designated Fire Zones
AT00949IB-T-SA-1	25.1301 and 25.1309	Equipment, Systems, and Installation Requirements: Use of ARAC Recommendations

Exemptions:

The Exemptions applicable to each model as defined in TCDS A28NM remain applicable plus the following exemption applied specifically to the Airbus SA NEO models:

Exemption No. 13048 for 25.841(a) dated September 25, 2015 (13048A dated February 22, 2018, 13048B dated March 6, 2019.)

Optional Requirements elected

- § 25.801 for ditching.
- § 25.1419 for icing.
- § 25.1535 for ETOPS

Noise standards

14 CFR part 36 Stage 4 as amended by Amendment 36-1 through Amendment 36-30.

14 CFR Part 36 through Amendment 36-31, Stage 5 for models; A321-251N, A321-252N, A321-253N, A321-271N, and A321-272N. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.

Fuel venting and exhaust emissions standards

14 CFR part 34 as amended by Amendment 34-1 through 34-5.

Part 26

14 CFR part 26 as amended by Amendment 26-1 through 26-5.

Additional Design Requirements and Conditions

Compliance with the established basis for type certification notwithstanding, § 21.21(b)(2) precludes issuance of a type certificate if there is any feature or characteristic that would make the product unsafe. The following design details or information must be maintained to ensure that an unsafe design condition is not present:

In-flight Engine Restart

- 1. A minimum restart capability after an all engines out scenario must be established under the following conditions using procedures provided in the airplane flight manual (AFM):
 - a) During the take-off and the initial climb-out portion of the flight, the airplane should have the capability for the flightcrew to restore engine power when the fuel source to the engine is interrupted.
 - b) During the high altitude portion of the flight at cruise speed and maximum altitude, the airplane should have the capability for the flightcrew to restart from a stabilized windmill speed those engines required to maintain level flight or should have the capability for the flightcrew to restart all but one of the engines and produce maximum continuous thrust or power by an altitude of 15,000 feet.
 - c) During flight at speeds greater than the minimum flaps-up "holding speed" and at altitudes below 20,000 feet, the airplane should have the capability for the flightcrew to restart with the engines at stabilized windmill speed those engines necessary to maintain safe flight and arrest the airplane descent within a total altitude loss of 5,000 feet prior to exceeding an airspeed of 300 knots.

Certification basis for the Airbus Model A321-271N, -251N & -253N installed with Modification 157272(Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 230 passengers:

The original certification basis for the Model A321- 271N. -251N & -253N plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-143 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	143	Fuselage Structure
25.321	143	Fuselage Structure
25.331	143	Fuselage Structure
25.341	143	Fuselage Structure
25.351	143	Fuselage Structure
25.473	143	Fuselage Structure
25.479(a)(c)(d)	143	Fuselage Structure
25.481(a)(c)	143	Fuselage Structure
25.489	143	Fuselage Structure
25.795(d)	143	Cabin Interior excl lavatories
25.801(d)	143	Entire Airplane
25.803(c)	143	Cabin Interior
25.807(g)	143	Cabin Interior
25.810	143	Cabin Interior
25.815	143	Cabin Interior
25.1447(c)(1)	143	Passenger equipment associated with increased MPSC
25.1519	143	Entire Airplane
25.1529	143	ICA associated with increased MPSC
25.1541(a)(b)	143	Marking & Placards associated with increased MPSC
25.1557(a)	143	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-143 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
,25.561,25.785,25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(k)(l), 25.813, 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.562	64
25.571(a)(b)	86
25.853(c)(d)(e)	116
25.305(a)(b),25.307(a), 25.365(a), 25.901(c)	136

Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification 157272 (MaxPax):

CS-2	§ 25.807 Emergency Exits	Finding for Increase of the Maximum Passenger Capacity (MPSC) from 220 passengers to 230 passengers
CS-6	§ 25.807 Emergency Exits	Finding for Increase of the Maximum Passenger Capacity (MPSC)

Optional Design Regulations:

Part 26:

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width must meet the regulatory minimum of 20 inches. The height of the attendant seat or other assembly is limited to a maximum height of 57 inches.
- The unobstructed exit dimensions of the forward and aft most floor level emergency exits must not be less than 32 inches x 73 inches.
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at the forward and aft
 most exits.
- The wide slides installed at the forward and aft most floor level exits must have a beam strength meeting the requirements of TSO-C69c.

Certification basis for the Airbus Model A321-271NX/-272NX/-251NX/-252NX/-253NX (A321 NEO Airbus Cabin Flex (ACF))):

The certification basis for the Airbus Model A321 New engine Option for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-141 (i.e., the amendment in affect on the date of application) applied to the components and areas affected by the change:

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
25.3	25-141	aircraft level
25.23	25-141	aircraft level
25.25	25-141	aircraft level
25.101(c)(d)(e)(f)(h),	25-141	aircraft level
25.109	25-141	aircraft level
25.113	25-141	aircraft level
25.115	25-141	aircraft level
25.117	25-141	aircraft level
25.147 (c)(d)	25-141	aircraft level
25.201	25-141	aircraft level
25.203	25-141	aircraft level
25.251 (d)(e)	25-141	aircraft level
25.301	25-141	aircraft level
25.303	25-141	aircraft level
25.305(a)(b)	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change	
25.305(c)(e)(f)	25-141	aircraft level	
25.307 (a)	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement	
25.321 (a)(b)(c)(d)	25-141	aircraft level	
25.331(a)(b)(c)	25-141	aircraft level	
25.333(a)(b)	25-141	aircraft level	
25.335	25-141	aircraft level	
25.337	25-141	aircraft level	
25.341(a)(b)	25-141	aircraft level	
25.341(c)	25-141	aircraft level	
25.343(a)	25-141	aircraft level	
25.343(b)(1)(2)	25-141	aircraft level	
25.343(b)(3)	25-141	aircraft level	
25.345 (a)(b)(d)	25-141 25-141	high lift aircraft level	
25.349(a)(1)(b) 25.351(a)(b)(c)(d)	25-141	aircraft level	
25.361(a)(b)(c)(d)	25-141	aircraft level	
25.362(a)(b)	25-141	aircraft level	
25.363(a)(b)	25-141	aircraft level	
25.365(a)(b)	25-141	fuselage	
25.365(d)	25-141	fuselage	
25.365 (e)(1)(2)(3)(f)	25-141	cabin & cargo compartments	
25.367(a)(b)	25-141	aircraft level	
25.371	25-141	aircraft level	
25.373 (a)(b)	25-141	aircraft level	
25.391(a)(b)(d)(e);	25-141	aircraft level	
25.427 (a)(b)(d)	25-141	aircraft level	
25.445(a)	25-141	aircraft level	
25.457	25-141	aircraft level	
25.459	25-141	aircraft level	
25.471 (a)(b)	25-141	aircraft level	
25.473	25-141	aircraft level	
25.479 (a)(c)(d)	25-141	aircraft level	
25.481(a)(c)	25-141	aircraft level	
25.483(a)(b)	25-141	aircraft level	
25.485(a)(b)	25-141	aircraft level	
25.489	25-141	aircraft level	
25.491	25-141	aircraft level	
25.493(b)(c)(d)(e)	25-141	aircraft level	
25.495	25-141	aircraft level	
25.499	25-141	aircraft level	
25.503	25-141	aircraft level	
25.507 (a)(b)	25-141	aircraft level	
25.509 (a)(b)(c)(d)	25-141	aircraft level	
25.511	25-141	aircraft level	
25.519	25-141	aircraft level	
25 5(1(-)(1)(-)(1)	25-141	A321neo ACF Structure Changes within section	
25.561(a)(b)(c)(d)		13/14/14A/15/16/17/21 new slides at OWDs/ Door 3	
	25-141	A321neo ACF Structure Changes within section	
25.571 (c)(e)	== - /-	13/14/14A/15/16/17/21 & wing local reinforcement	
	25-141	A321neo ACF Structure Changes within section	
25.501	20 111	13/14/14A/15/16/17/21 & wing local reinforcement	
25.581		MLG local reinforcement	
		New OWDs system	

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
		Additional over-wing Emergency lights implementation/ EPSU relocation
25.601	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement MLG local reinforcement
25.603	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement MLG local reinforcement
25.605	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement MLG local reinforcement
25.607	25-141	New OWDs System
25.609	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement MLG local reinforcement
25.611 (a)	25-141	aircraft level
25.611 (b)	25-141	New slides at OWDs/Door 3
25.613	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement MLG local reinforcement
25.619	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement MLG local reinforcement
25.621	25-141	New OWDs System
25.623	25-141	New OWDs System
25.625	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement MLG local reinforcement
25.629 (a)(b)(c)(d)(e)	25-141	aircraft level
25. 631	25-141	aircraft level
25.703(b)(c)	25-141	FWS
25.723(a)(b)(c)	25-141	Main Landing gear
25.729 (a)(b)(d)(e)	25-141	Main Landing gear
25.729 (f)	25-141	Main Landing gear
25.731(a) (b)(c)	25-141	Main and Nose Landing gear wheels
25.733(b)(c)(d)	25-141	Main and Nose Landing gear tyres
25.735(a)(f)(2)	25-141	MLG brakes (RTO)
25.783 25.782(a)(4)	25-141	New OWDs System
25.783(e)(4) 25.787(c)	25-141 25-141	Door 3 relocated- Aural warning cargo compartment: light relocation
25.795 (c)(1)(c)(3)(i)	25-141	aircraft level
25.795 (c)(1)(c)(3)(1) 25.795(d)	25-141	cabin interior
25.801(a)(d)	25-141	aircraft level
25.803 (a)(c)	25-141	cabin interior: cabin arrangement at D3/ OWDs, New slides at door 3/OWDs, wide slides at D1&4
25.807(a)(3)(9) (b) (c) (e) (f) (h)(1) (g) (i)	25-141	cabin interior arrangement: New slides at door 3/OWDs wide slide at door 1&4
25.809(b) (c) (e) (f) (i)	25-141	New OWDs system
25.809 (g)	25-141	all doors
25.810(a)(1)(c)(d)	25-141	New OWDs System New slides at door 3/ OWDs wide slide at door 1 &4
25.811	25-141	OWDs & Door 3 Marking / identification

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
25.812 (a)(b)(1)(c)(d)(e)(f)(g)(h)(i)(j)(k)(l)	25-141	emergency lighting at new OWD/ door 3 /New slides at door 3/ OWDs
25.813 (a)(b)(c)	25-141	Cabin interior: interior arrangement at door 3 and OWD
25.843(a)	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21
25.843(b)(4)	25-141	New OWDs system
25.853(a)(d)(1)	25-141	New OWDs System
25.855(a)	25-141	cargo compartment
25.855(c)	25-141	cargo compartment: lining adaptation
25.856	25-141	New OWDs System
25.857	25-141	cargo compartments
25.858	25-141	forward cargo compartment linked to the relocation of smoke detection cavity
25.863(a)(b)(d)	25-141	flammable fluid A/C Zoning: smoke cavity relocation cargo compartment
25.869(a)(1)	25-141	Additional over wing Emergency lights implementation/ EPSU relocation
25.899	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 and local wing reinforcement MLG local reinforcement New OWDs system new slides at OWD and door 3 Additional Emergency lights implementation/ EPSU relocation
25.903(c)	25-141	aircraft level
25.903(d)(1)	25-141	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement New OWDs system and associated slides
25.951(a)	25-141	secondary change: APU fuel line rerouted
25.952(a)	25-141	secondary change: APU fuel line rerouted
25.955(a)(1)	25-141	secondary change: APU fuel line rerouted
25.963(a)	25-141	All fuel tank
25.993	25-141	secondary change: APU fuel line relocated
25.994	25-141	secondary change: APU fuel line relocated
25.1001(a)(b)(c)(d)	25-141	aircraft level
25.1301(a)	25-141	New OWDs OWD/Door 3 New slides Additional Over Wing Emergency Lights Emergency lights/EPSU relocation smoke detector cavity relocated FWC software change EIS software change
25.1301(b)	25-141	New slides at OWD/Door 3
25.1309 (a)	25-141	OWDs System Door 3-Aural warning New slides at OWDs/Door 3 new Emergency lights/ EPSU relocation smoke detector cavity relocated FWC software EIS software
25.1309 (b)	25-141	OWDs System New slides at OWDs/Door 3 new Emergency lights/ EPSU relocation performance analysis due to tyre pressure increase FWS

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
		EIS
	25-141	OWDs system
25.1309 (c)		FWC software
	25 141	EIS software
25.1309 (d)	25-141	OWDs system
25.1309 (f)	25-141	New slides at OWDs/Door 3
25.1316	25-141	OWDs system
25.1317	25-141	OWDs system
25.1353	25-141	OWDs system New slides at door 3/OWDs
25.1360	25-141	cabin and cargo: Additional lights / Emergency light & EPSU relocation OWDs system OWE & D3 Evacuation Systems
25.1411(a)(b)(c)(d)(e)(f)(g)	25-141	New slides at OWDs/Door 3 liferaft installation long range signaling device installation life preserver installation
25.1431(a)(c)(d)	25-141	OWDs system Additional over wing Emergency lights implementation/connection to EPSU
25.1441	25-141	cabin interior
25.1447 (a)(c)(1)(4)	25-141	cabin interior
25.1450	25-141	cabin interior
25.1511	25-141	aircraft level
25.1519	25-141	aircraft level
25.1529	25-141+ app H at amdt 56 /14 CFR Part 26	aircraft level
25.1533(a)(b)	25-141	aircraft level
25.1535 ,Appendix K to Part 25	25-141	aircraft level
25.1541	25-141	Markings/ Placards OWE / Door 3 operation, cargo placards
25.1545	25-141	Limit speed placard
25.1557(a)(c)	25-141	cabin interior / External marking
25.1561(a)	25-141	New slides at OWD & Door 3
25.1581	25-141	aircraft level
25.1583	25-141	aircraft level
25.1587	25-141	aircraft level
25.1703 (a)(b)(d)	25-141	New slides at OWDs/Door 3
25.1705 (a)	25-141	New slides at OWDs/Door 3
25.1707 (a)	25-141	New slides at OWDs/Door 3
25.1707 (d)	25-141 25-141	New slides at OWDs/Door 3 New slides at OWDs/Door 3
25.1707(l) 25.1709	25-141	New slides at OWDs/Door 3 New slides at OWDs/Door 3
	25-141	
25.1711 (a)		New slides at OWDs/Door 3
25.1711 (c) 25.1711 (d)	25-141 25-141	New slides at OWDs/Door 3 New slides at OWDs/Door 3
25.1711 (d) 25.1711 (e)	25-141	New slides at OWDs/Door 3
25.1713 (a)	25-141	New slides at OWDs/Door 3
25.1713 (c)	25-141	New slides at OWDs/Door 3
25.1715(a)(b)	25-141	New slides at OWDs/Door 3

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
25.1717	25-141	New slides at OWDs/Door 3
25.1719	25-141	New slides at OWDs/Door 3
25.1721(a)	25-141	New slides at OWD & Door 3
25.1721(b)	25-141	New slides at OWDs/Door 3
25.1725 (b)	25-141	New slides at OWDs/Door 3

Plus the following sections of 14 CFR part 25 amended as indicated below applied to the components and areas affected by the change per Airbus reversion justification:

The following sections of 14 CFR part 25 amended as indicated below and applied to the cabin interior adaptations, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-141 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
25.853(c)(d)(e)(f)(g)(h)	116
25.562 except (c)(5)(c)(6)	64
25.561,25.785,25.787(a)(b), 25.789(a),	
25.791,25.793, 25.811(marking at door1&4),	
25.815, 25.817 25.851(a)(1) 25.853(a)(b), 25.1301,	56
25.1309, 25.1351(a)(1), 25.1353(a)(b),	30
25.1357(a)(c)(g), 25.1359 (a)(d), 25.1413, 25.1415	
(a)(b)(c)(d), 25.1431 (c), 25.1561	

The following section of 14 CFR part 25 amended as indicated below and applied to the outside viewing requirement at door 1, 3 & 4 as described has been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-141 would not materially increase the level of safety.

14 CFR Section	FAA Accepted Amendment Level
25.809 (a)	25-115

FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-132) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).

14 CFR Section	FAA Accepted Amendment Level
25.571(a)(b)	25-86

The following section of 14 CFR part 25 has been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-141 would not materially increase the level of safety or in some cases, would be impractical.

14 CFR Section	FAA Accepted Amendment Level
25.21(a)(d)	
25.103	
25.105	
25.107	
25.111	
25.121	120
25.123	
25.143 (a)(b)(3)(g)	

FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-131) would be impractical in accordance with 14 CFR 21.101(b)(3).

14 CFR Section	FAA Accepted Amendment Level
25.1322	56

The following sections of 14 CFR part 25 amended as indicated below and applied to the Main Landing Gear structural adaptations, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-141 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
25.1301	56

FAA determined, in accordance with the § 21.101(b)(3) that applying EWIS regulations to the wiring adaptations in the cabin and to the wiring adaptation linked to the implementation of the new OWDs, relocation of the door 3 and associated lights, would not materially increase the level of safety.

Special Conditions:

In accordance with § 21.16, the special conditions applied to the baseline Model airplanes as listed in FAA TCDS A28NM Revision 34 are retained and applicable to the components and areas affected by these changes.

In addition the following FAA Special Condition applies to the Airbus Model A321neo ACF Airplane:

 Special Conditions No. 25-779-SC Effective January 11, 2021 - "Dynamic Test Requirements for Single-Occupant Oblique (Side-Facing) Seats with 3-point Restraint"

Equivalent Safety Findings:

The equivalent level of Safety (ESF) applied to the baseline Model airplanes as listed in FAA TCDS A28NM Revision 34 remains applicable;

In addition following ELOS IPs have been raised:

AT10637IB-T-CS-3	25.807(a)(3), (b) & (c) Emergency Exit	Increased Stepdown Dimension and Passageway
	25.813(c)(1) & (c)(2) Emergency exit access	Displacement for Type III Exits
AT10637IB-T-CS-4	§ 25.807 Emergency Exits	Increased Passenger Credit for Type III Over- Wing Exits

Exemptions:

The Exemptions applicable to each model as defined in TCDS A28NM remain applicable plus the following exemptions applied specifically to the Airbus A321-271NX,-272NX,-251NX,-252NX and -253NX:

Exemption No.17122: A321neo ACF Over Wing Exit exemption from 14 CFR Part 25.809(a)

Extension of Exemption No. 13048 FAA partial grant of exemption from Section 25.841(a)(2)(i) and (ii) and (a)(3) Amendment 25-87 of A320N family.

Exemption No. 18016: A321 neo ACF exemption from 14 CFR Part 25.807(g)(7)

Note: Airbus has elected to comply with 25.807 (h)(1). If for a specific layout, the Door 3 is considered in addition to the minimum required as per 25.807 (h)(1), the Exemption is not applicable

Exemption No. 18674: A321 neo A321neo ACF exemption from 14 CFR Part §§ 25.813(e), 121.310(f)(5), and 121.310(f)(6).

Optional Design Regulations:

Original design approvals for the reference airplane are retained.

- Ditching
- Flight in Icing Conditions
- ETOPS

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Airworthiness and Environmental Standards for components and areas affected by the change

Noise Standards

14 CFR part 36 as amended by Amendment 36-1 through amendment 36-30 is applicable.

14 CFR Part 36 through Amendment 36-31, Stage 5 for models; A321-251N, A321-252N, A321-253N, A321-271N, and A321-272N. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.

Fuel Venting and Exhaust Emissions Standards

No emissions change according to §21.93(c) / 14 CFR part 34 as amended by Amendment 34-1 through amendment 34-4 stay applicable.

Part 26:

14 CFR part 26 as amended by Amendment 26-1 through amendment 26-6 is applicable.

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
26.11	26-6	aircraft level
26.21	26-6	aircraft level
26.43(b)(c)	26-6	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement
26.45(b)	26-6	A321neo ACF Structure Changes within section 13/14/14A/15/16/17/21 & wing local reinforcement

Additional Design requirements and Conditions:

Compliance with the established basis for type certification notwithstanding §21.21(b)(2) preclude issuance of a type certificate if there is any feature or characteristic that would make the product unsafe. No unsafe design condition is considered.

Certification basis for the Airbus Model A321-251NX, -252NX, -353NX, -271NX, -272NX installed with up to 3 additional center tanks (Modification 163213):

The original certification basis for the <u>A321-251NX, -252NX, -353NX, -271NX, -272NX</u> -plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-141 applied to the components and areas affected by the change, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
25.3	25-141	aircraft level
25.23	25-141	aircraft level
25.25	25-141	aircraft level
25.303	25-141	aircraft level
25.305 (a)(b)	25-141	cargo compartment : adaptation linked to ACTs installations ACTs installation structure Changes in lower lobe fuselage
25.307 (a)	25-141	cargo compartment : adaptation linked to ACTs installations ACTs installation structure Changes in lower lobe fuselage
25.321 (a)(b)(c)(d)	25-141	aircraft level
25.331(a)(b)(c)	25-141	aircraft level
25.341(a)(b)	25-141	aircraft level
25.343(a)	25-141	aircraft level
25.343(b)(3)	25-141	aircraft level
25.351(a)(b)(c)(d)	25-141	aircraft level
25.365(a)(b)	25-141	aircraft level
25.365 (e)(1)(2)(3)(f)	25-141	Cabin and cargo compartments
25.473	25-141	aircraft level
25.479 (a)(c)(d)	25-141	aircraft level
25.481(a)(c)	25-141	aircraft level

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change	
25.489	25-141	aircraft level	
25.561(b)(c)(d)	25-141	ACTs installation structure Changes in lower lobe fuselage	
25.571 (c)(e)	25-141	ACTs installation structure Changes in lower lobe fuselage	
25.581	25-141	Additional Service area light installation between FWD ACT and the centre wing box ACT fuel system installation	
25.601	25-141	ACTs installation structure Changes in lower lobe fuselage cargo compartment	
25.603	25-141	ACTs installation structure Changes in lower lobe fuselage	
25.605	25-141	ACTs installation structure Changes in lower lobe fuselage	
25.609	25-141	ACTs installation structure Changes in lower lobe fuselage	
25.611 (a)	25-141	aircraft level	
25.611 (b)	25-141	ACT fuel system installation	
25.613	25-141	ACTs installation structure Changes in lower lobe fuselage	
25.619	25-141	ACTs installation structure Changes in lower lobe fuselage	
25.625	25-141	ACTs installation structure Changes in lower lobe fuselage	
25.629 (a)(b)(c)(d)(e)	25-141	aircraft level	
25.721(b)	25-141	ACTs installation in lower lobe fuselage	
25.777(a)	25-141	ACTs fuel system installation: new overhead panel	
25.787(c)	25-141	cargo compartment: light relocation	
25.810(a)(1)	25-141	ACT: Relocation of the slide inflation system of the Off- Wing Evacuation Systems into OHSC	
25.851(b)(2)	25-141	fwd and aft cargo linked to the reduction of cargo volume associated with ACTs installation	
25.855(a)	25-141	cargo compartment	
25.855(c)	25-141	cargo compartment: lining adaptation	
25.855(e)(f)(g)(h)	25-141	cargo compartment associated with ACTs installation	
25.856 (b)	25-141	ACT Provision Installation	
25.857	25-141	cargo compartments	
25.858	25-141	fwd and aft cargo linked to the reduction of cargo volume associated with ACTs installation	
25.863(a)(b)	25-141	flammable fluid A/C Zoning: smoke cavity relocation ACT fuel system installation	
25.863(c)	25-141	ACT fuel system installation	
25.863(d)	25-141	flammable fluid A/C Zoning: smoke cavity relocation ACT fuel system installation	
25.869(a)(1)	25-141	Additional Cargo light relocation Service area light installation for FWD ACT ACTs FQIS/FLSS wiring segregation and protection	
25.869(a)(3)	25-141	ACTs FQIS/FLSS wiring segregation and protection Fire extinguishing system adaptation when ACT installed in Cargo compartment	
25.899	25-141	Additional Service area light installation for FWD ACT ACT fuel system installation	
25.901(c)	25-141	ACT fuel system installation	
25.903(c)	25-141	aircraft level	
25.903(d)(1)	25-141	ACTs installation structure Changes in lower lobe fuselage ACT fuel system installation	
25.943	25-141	ACT transfer system ACT pressurization system	
25.951(c)	25-141	ACT refuel/transfer system	
25.952(a)	25-141	ACT refuel/transfer system ACT pressurization system ACT fuel venting system	
25.954	25-141	ACT fuel system installation	
25.957	25-141	ACT refuel/transfer system ACT pressurization system ACT fuel venting system	

25.959 25.14 ACT fiel system installation	14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
25.141	25.959	_	
25.94(d) 25.14 new ACTs installation 25.965(a) (b)c)(d) 25.14 ACT fied system installation 25.967(a)(b)(c) 25.14 ACT fied system installation 25.969 25.14 ACT fied system installation 25.971 25.14 ACT fied system installation 25.971 25.14 ACT fied system installation 25.971(a)(d) 25.14 ACT fied system installation 25.977(a)(d) 25.14 ACT fied system installation 25.977(a)(d) 25.14 ACT fied system installation 25.997(a)(d) 25.14 ACT fied system installation 25.998(a)(d)(d) 25.14 ACT fied system installation 25.998(a)(d)(d) 25.14 ACT fied system installation 25.998(a)(d)(d) 25.14 ACT fied system installation 25.999(a)(d) 25.14 ACT fied system installation 25.999(a)(b) 25.14 ACT fied system installation 25.101(b) 25.14 ACT fied system installation 25.114(a)(b)(c)(d)(f) ACT structuration system 25.1301(a) EVA system installation 25.1301(a) EVA system installation 25.1301(a) EVA system installation 25.1301(a) EVA system installation 25.1305(a)(2) 25.14 ACT installation 25.1305(a)(d)(f) 25.14 ACT installation 25.1305(a)(d)(f) 25.14 ACT installation 25.1305(a)(d)(f) 25.14 ACT fied system installation 25.1316 25.1316 25.1316 25.1317 25.1316 25.1317 25.1316 ACT fied system installation 25.1316 25.1316 25.1317 25.1316 ACT fied system installation 25.1317 25.1316 ACT fied system installation 25.1317 25.1318 ACT fied system installation 25.1318 ACT fied system installati			
25.141 ACT fiel system installation	25.963(b)(c)(e)(f)	25-141	ACT fuel system installation
25.141	25.963(d)	25-141	new ACTs installation
25.141	25.965(a) (b)(c)(d)	25-141	ACT fuel system installation
25.191	25.967(a)(b)(e)		ACT fuel system installation
25.1301(a) 25.141 ACT fuel venting system		25-141	ACT fuel system installation
25.1301(a) 25.141		25-141	ACT fuel system installation
25.190(b(c)(d)(c) 25.141	25.975(a)	25-141	ACT fuel venting system
25.141 ACT fuel system installation	25.977(a)(c)(d)	25-141	ACT fuel system installation
25.141	25.979(b)(c)(d)(e)		
25.141	25.981(a)(b)(d)	25-141	ACT fuel system installation
25.99(a)(b) 25.141		25-141	
ACT fuel system installation 25.141 ACT fuel system installation 25.141 aircraft level	25.994	25-141	ACT refuel/transfer system
25.1011(b) 25.141 ACTs fuel System installation Els software Els soft		25-141	
25.141	25.999(a)(b)	25-141	
25.1141(a)(b)(c)(d)(f)	25.1011(b)	25-141	
ACTs transfer system		25-141	
25.141	25.1141(a)(b)(c)(d)(f)		
25-141			
EIS software change	25.1189(h)		
ACT fuel system installation fire extinguishing system adaptation within cargo compartment when ACT installed ATA 330 service area light, light relocation, in cargo compartment linked to ACT installation		25-141	
25.1301(a) fire extinguishing system adaptation within cargo compartment when ACT installed ATA 330 service area light, light relocation, in cargo compartment linked to ACT installation			
Compartment when ACT installed ATA 330 service area light, light relocation, in cargo compartment linked to ACT installation			
ATÁ 330 service area light, light relocation, in cargo compartment linked to ACT installation	25.1301(a)		
compartment linked to ACT installation			
25.1301(b) 25.141 ACT fuel system installation			
25.1302(a)(b)(c) 25-141	25 1201(1)	25 141	
25.1305(a)(2) 25-141 ACTs fuel system installation			
25.1309(a) 25-141 EIS software ACT fuel system installation EIS software ACT fuel system installation ACT Cargo restraint System ACT fuel system installation ACT fuel s			
25.1309(a) 25-141 EIS software ACT fuel system installation ATA 330 service area light, light relocation, in cargo compartment linked to ACT installation Fire extinguishing system adaptation within cargo compartment when ACT installation FWS EIS ACT fuel system installation ACT Cargo restraint System ACT fuel system installation ACT Cargo restraint System FWC software ACT fuel system installation ACT	25.1305(a)(2)	25-141	
25.1309(b) 25-141 Fire extinguishing system adaptation within cargo compartment when ACT installed FWS EIS ACT fuel system installation ACT Cargo restraint System	25.1309(a)	25-141	compartment when ACT installed FWC software EIS software ACT fuel system installation ATA 330 service area light, light relocation, in cargo
25.1309(c) 25-141 EIS software ACT fuel system installation 25.1309(d) (f) 25-141 ACT fuel system installation 25.1310 25-141 ACTs fuel system installation 25.1316 25-141 ACT fuel system installation 25.1317 25-141 ACT fuel system installation 25.1337(b) 25-141 ACTs fuel system installation 25.1353 25-141 ACT fuel system installation 25.1360 25-141 cargo: Additional lights ACT installation: New overhead panel Fire extinguishing system cockpit panel adaptation when ACT installed	25.1309(b)	25-141	Fire extinguishing system adaptation within cargo compartment when ACT installed FWS EIS ACT fuel system installation ACT Cargo restraint System
25.1310 25-141 ACTs fuel system installation 25.1316 25-141 ACT fuel system installation 25.1317 25-141 ACT fuel system installation 25.1337(b) 25-141 ACTs fuel system installation 25.1353 25-141 ACT fuel system installation 25.1360 25-141 cargo: Additional lights ACT installation: New overhead panel Fire extinguishing system cockpit panel adaptation when ACT installed	25.1309(c)	25-141	EIS software ACT fuel system installation
25.1310 25-141 ACTs fuel system installation 25.1316 25-141 ACT fuel system installation 25.1317 25-141 ACT fuel system installation 25.1337(b) 25-141 ACTs fuel system installation 25.1353 25-141 ACT fuel system installation 25.1360 25-141 cargo: Additional lights ACT installation: New overhead panel Fire extinguishing system cockpit panel adaptation when ACT installed	25.1309(d) (f)	25-141	
25.131725-141ACT fuel system installation25.1337(b)25-141ACTs fuel system installation25.135325-141ACT fuel system installation25.136025-141cargo: Additional lightsACT installation: New overhead panelACT installation: New overhead panel Fire extinguishing system cockpit panel adaptation when ACT installed	25.1310	25-141	
25.1337(b) 25.141 ACTs fuel system installation 25.1353 25.141 ACT fuel system installation 25.1360 25.141 cargo: Additional lights ACT installation: New overhead panel Fire extinguishing system cockpit panel adaptation when ACT installed			
25.1353 25-141 ACT fuel system installation 25.1360 25-141 cargo: Additional lights ACT installation: New overhead panel Fire extinguishing system cockpit panel adaptation when ACT installed		25-141	
25.1360 25-141 cargo: Additional lights ACT installation: New overhead panel Fire extinguishing system cockpit panel adaptation when ACT installed			
ACT installation: New overhead panel 25.1381 25-141 Eigenvalue ACT installation: New overhead panel Fire extinguishing system cockpit panel adaptation when ACT installed		I .	
25.1381 25-141 Fire extinguishing system cockpit panel adaptation when ACT installed	25.1360	25-141	
	25.1381	25-141	Fire extinguishing system cockpit panel adaptation when
/3 143 HARCHOLD /3-141 LACT filed system installation	25.1431(a)(c)(d)	25-141	ACT fuel system installation

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14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
25.1519	25-141	aircraft level
25.1529	25-141+ app H at amdt 56 /14 CFR Part 26	aircraft level
25.1535 ,Appendix K to Part 25	25-141	aircraft level
25.1541	25-141	cargo placards
25.1543(b)	25-141	ACT fuel system installation: overhead panel
25.1553	25-141	Common Fuel Quantity Indication system adaptation for ACT system
25.1555(a)	25-141	ACT fuel system installation: overhead panel fire extinguishing system cockpit panel adaptation
25.1555(c)	25-141	ACT fuel system installation: overhead panel
25.1557(a)	25-141	cargo compartment linked to ACTs installation
25.1581	25-141	aircraft level
25.1583	25-141	aircraft level
25.1585	25-141	aircraft level
25.1703 (a)(b)(d)	25-141	ACTs fuel system wiring installation
25.1705(a) (b)	25-141	ACTs fuel system wiring installation
25.1707(a) (b) (c) (l)	25-141	ACTs fuel system wiring installation
25.1709	25-141	ACTs fuel system installation
25.1711(a) (b) (c) (d) (e)	25-141	ACTs fuel system wiring installation
25.1713(a) (c)	25-141	ACTs fuel system wiring installation
25.1715(a)(b)	25-141	ACTs fuel system wiring installation
25.1717	25-141	ACTs fuel system wiring installation
25.1719	25-141	ACTs fuel system wiring installation
25.1721(b)	25-141	ACTs fuel system wiring installation
25.1723	25-141	ACTs fuel system wiring installation
25.1725(b)	25-141	ACTs fuel system wiring installation

FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-141) would not materially increase the level of safety in accordance with 14 CFR 21.101(b)(3).

14 CFR Section	FAA Accepted Amendment Level
25.571(a)(b)	25-86

FAA acceptance of this reversion was based on a determination that compliance with the amendment in effect on the date of application for this rule (i.e., Amendment 25-141) would be impractical in accordance with 14 CFR 21.101(b)(3).

14 CFR Section	FAA Accepted Amendment Level
25.1322	56

Special Conditions:

In accordance with § 21.16, no additional special conditions have been identified. The special conditions applied to the baseline Model airplanes as listed in FAA TCDS A28NM Revision 37 are retained and applicable to the components and areas affected by these changes.

Equivalent Safety Findings:

The equivalent level of Safety (ESF) applied to the baseline Model airplanes as listed in FAA TCDS A28NM Revision 34 remains applicable;

Airworthiness and Environmental Standards for components and areas affected by the change

Noise Standards

14 CFR part 36 as amended by Amendment 36-1 through amendment 36-30 is applicable.

14 CFR Part 36 through Amendment 36-31, Stage 5 for models; A321-251NX, A321-252NX, A321-253NX, A321-271NX, and A321-272NX. The means of implementation of Stage 5 recertification must be provided by Airbus to ensure availability of the

revised AFM noise pages for all affected aircraft. AFM CP293 issue 1.0 dated October 2, 2018 or later revision approved by EASA.

Fuel Venting and Exhaust Emissions Standards

No emissions change according to §21.93(c) / 14 CFR part 34 as amended by Amendment 34-1 through amendment 34-4 stay applicable.

Part 26:

14 CFR part 26 as amended by Amendment 26-1 through amendment 26-6 is applicable.

14 CFR Section	FAA accepted amendment level	System/Component/Area Affected by the Change
26.11	26-6	aircraft level
26.21	26-6	aircraft level
26.35	26-6	ACT Fuel system installation
26.43(b)(c)	26-6	ACTs installation structure Changes in lower lobe fuselage
26.45(b)	26-6	ACTs installation structure Changes in lower lobe fuselage

Additional Design requirements and Conditions:

Compliance with the established basis for type certification notwithstanding §21.21(b)(2) preclude issuance of a type certificate if there is any feature or characteristic that would make the product unsafe. No unsafe design condition is considered.

Certification basis for the Airbus Model A321- 211, -212, -213, -231 & -232 installed with Modification 159536 (Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 230 passengers:

The original certification basis for the Model A321-211, -212, -213, -231 & -232 plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-143 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	143	Fuselage Structure
25.321	143	Fuselage Structure
25.331(a)(b)(c)(1)	143	Fuselage Structure
25.341(a)	143	Fuselage Structure
25.351	143	Fuselage Structure
25.473	143	Fuselage Structure
25.479(a)(c)(d)	143	Fuselage Structure
25.481(a)(c)	143	Fuselage Structure
25.489	143	Fuselage Structure
25.795(d)	143	Cabin Interior excl lavatories
25.801(d)	143	Entire Airplane
25.803(c)	143	Cabin Interior
25.807(g)	143	Cabin Interior
25.810	143	Cabin Interior
25.815	143	Cabin Interior

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.1447(c)(1)	143	Passenger equipment associated with increased MPSC
25.1519	143	Entire Airplane
25.1529	143	ICA associated with increased MPSC
25.1541(a)(b)	143	Marking & Placards associated with increased MPSC
25.1557(a)	143	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-143 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
25.305(a)(b),25.307(a),25.331(c)(2),25.341(b) 25.365(a), 25.561, 25.571(a)(b), 25.785, 25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(k)(l), 25.813, 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.562	64
25.853(c)(d)(e)	116
25.365(a), 25.901(c)	136

Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification <u>159536</u> (MaxPax):

CS-2	§ 25.807 Emergency Exits	Finding for Increase of the Maximum Passenger Capacity (MPSC) from 220 passengers to 230 passengers
CS-6	§ 25.807 Emergency Exits	Finding for Increase of the Maximum Passenger Capacity (MPSC)

Optional Design Regulations:

ETOPS:

Model <u>A321-211, -212, -213, -231 & -232</u> airplanes installed with modification <u>159536</u> (MaxPax) have not been evaluated for extended operations (ETOPS) type design approval.

Part 26:

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width must meet the regulatory minimum of 20 inches. The height of the attendant seat or other assembly is limited to a maximum height of 57 inches.
- The unobstructed exit dimensions of the forward and aft most floor level emergency exits must not be less than 32 inches x 73 inches.

- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at the forward and aft
 most exits.
- The wide slides installed at the forward and aft most floor level exits must have a beam strength meeting the requirements of TSO-C69c.

Certification basis for the Airbus Model A321-272N, A321-252N installed with Modification 157272(Max Pax), for the certification of a Maximum Passenger Seating Capacity (MPSC) of 230 passengers:

The original certification basis for the Model A321-272N, A321-252N plus the following sections of 14 CFR part 25 as amended by Amendments 25-1 through 25-145 applied to the components and areas affected by the change, equivalent level of safety finding, Optional Design Regulations, 14 CFR part 26, Additional Design Requirements and Conditions:

14 CFR Section	FAA Accepted Amendment Level	System/Component/Area Affected by the Change
25.23	143	Fuselage Structure
25.321	143	Fuselage Structure
25.331	143	Fuselage Structure
25.341(a)(b)	143	Fuselage Structure
25.351	143	Fuselage Structure
25.473	143	Fuselage Structure
25.479(a)(c)(d)	143	Fuselage Structure
25.481(a)(c)	143	Fuselage Structure
25.489	143	Fuselage Structure
25.795(d)	143	Cabin Interior excl lavatories
25.801(d)	143	Entire Airplane
25.803(c)	143	Cabin Interior
25.807(g)	143	Cabin Interior
25.810	143	Cabin Interior
25.815	143	Cabin Interior
25.1447(c)(1)	143	Passenger equipment associated with increased MPSC
25.1519	143	Entire Airplane
25.1529	143	ICA associated with increased MPSC
25.1541(a)(b)	143	Marking & Placards associated with increased MPSC
25.1557(a)	143	Marking & Placards associated with increased MPSC

The following sections of 14 CFR part 25 amended as indicated below and applied to the components and areas affected by the change, have been determined in accordance with the § 21.101(b)(3) that compliance with the Amendment 25-145 would not materially increase the level of safety:

14 CFR Section	FAA Accepted Amendment Level
,25.561, 25.785, 25.787(a)(b), 25.789(a), 25.791, 25.809, 25.811, 25.812(e)(k)(l), 25.813, 25.853(a)(b), 25.1301, 25.1309, 25.1351(a), 25.1353(a)(b), 25.1357(a)(c)(g), 25.1359(a)(d), 25.1413, 25.1415(b)(c)(d), 25.1431(c), 25.1561	56
25.562	64
25.571(a)(b)	86
25.853(c)(d)(e)/ IP CI-10	116
25.305(a)(b),25.307(a), 25.365(a), 25.901(c)	136

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Equivalent Safety Findings:

In accordance with the provisions of § 21.21(b)(1) the following new ELOS finding is applicable to Modification 157272 (MaxPax):

CS-2 § 25.807 Emergency Exits Finding for Increase of the Maximum Passenger Capacity (MPSC) from 220 passengers to 230

passengers

CS-6 § 25.807 Emergency Exits Finding for Increase of the Maximum Passenger

Capacity (MPSC)

Optional Design Regulations:

Part 26

Based on 14 CFR § 21.101(g), applicable provisions of 14 CFR part 26 are included in the certification basis. For any future 14 CFR part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections. The type design complies with the following 14 CFR part 26 Amendments 26-1 through 26-6 regulations: §§ 26.11, 26.33, 26.43, and 26.45.

Additional Design Requirements and Conditions:

Limitation:

- The exit passageway width must meet the regulatory minimum of 20 inches. The height of the attendant seat or other assembly is limited to a maximum height of 57 inches.
- The unobstructed exit dimensions of the forward and aft most floor level emergency exits must not be less than 32 inches x 73 inches.
- A wide slide (sliding surface width 82.75 inches (+3.0 inches, -2.0 inches)) must be installed at the forward and aft most exits.
- The wide slides installed at the forward and aft most floor level exits must have a beam strength meeting the requirements of TSO-C69c.

Note 1:

The A321 basic type design definition for U.S. import certification is contained in the following documents:

- 00E000A0010/C11 for A321-111 model
- 00E000A0011/C11 for A321-112 model
- 00E000A0012/C11 for A321-131 model
- AI/EA-S 413.3365/96 (supplement) for A321-111/112/131 models
- AI/EA-S 413.0401/97 for A321-211 model
- AI/EA-S 413.0399/97 for A321-231 model
- AI/EA-S 413.1641/01 for A321-212 Model
- AI/EA-S 413.1642/01 for A321-213 Model
- AI/EA-S 413.1639/01 for A321-232 Model
- 00D000A5072/C20 for A321-271N Model
- 00E000A5075/C20 for A312-251N Model
- 00E000A5115/C20 for A321-253N Model
- 00E000A5116/C20 for A321-272N Model
- 00E000A5195/C00 for A321-252N Model
- 00E000A5132/C00 for A321-271NX Model
- 00E000A5134/C00 for A312-251NX Model
- 00E000A5136/C00 for A321-253NX Model
- 00E000A5133/C00 for A321-272NX Model
- 00E000A5135/C00 for A321-252NX Model

Note 2:

For A321-111,-112,-131,-211,-212,-213,-231,-232,-271N,-272N,-251N,-252N,-253N Door 2 and/or Door 3 may be derated to Type III.

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Note 3:

For models A321-111 and A321-112, modification 25199 is the minimum standard to be qualified for Cat IIIB precision approach.

For models A321-131, modification 25200 is the minimum standard to be qualified for Cat IIIB precision approach.

A321-211, A321-212, A321-213, A321-231 & A321-232 are basically qualified for Cat IIIB precision approach.

For models 321-251N, -252N, -253N, -271N, -272N, 271NX, -272NX, -251NX, -252NX, -253NX modification 161765 is the minimum standard to be qualified for CAT IIIB precision approach.

Note 4:

If FWC Standard D2 and FAC standard BAM 0510 are fitted on A321 aircraft, VFE speed in configuration 2 is increased from 205kts to 215kts (as identified by speed limitation placard installed by modification 24641).

Note 5:

Modifications 25302 (thrust reverser third line of defense for IAE engine) and 25303 (thrust reverser third line of defense for CFM engine) are part of the FAA Type Design, and shall be implemented on any A321 aircraft entered on the U.S. register, before the individual U.S. standard Certificate of Airworthiness be issued.

Note 6:

If modification 25800 is embodied on models with CFM56-5B engines, the engine performance is improved. The engine denomination changes to /P.

CFM56-5B/"non-P" engine can be intermixed with CFM56-5B/P engine on the same aircraft.

Note 7:

On the A321-211,-212,-213,-231,-232,-271N,-272N,-251N,-252N,-253N, one Additional Center Tank (ACT) in bulk version is defined by modification 25453 (high pressure system). Its approval together with structural and system provisions was subject of compliance demonstrated to Advisory Circular (AC) 25-8.

Note 8:

The type design definitions and certification standard equipment lists as referenced in Note 1 above are complemented by document 00D000A0546/C0S "A319-100/A321-200 FMGC Type Standard Evolution".

Note 9:

On the A321-211,-212,-213,-231,-232,-271N,-272N,-251N,-252N,-253N, one or two Additional Center Tanks (ACT) in bulk version are defined by modification 30422 (low pressure system). Their approval together with structural and system provisions was subject of compliance demonstrated to AC 25-8.

Note 10:

On the series A321-200, Weight Variant 001, 002 & 011, VFE speed in Configuration 1 is increased from 230 to 235 kts, and in Configuration 1+F increased from 215 to 225 kts (as identified by speed limitation placard installed by modification 28960, 28721 or 32456).

Note 11:

If modification 26610 is embodied on A321-111 & -212 airplanes, the engine performance and gaseous emission levels are improved. The engine denomination changes to /2P (DAC IIC Dual Annual Combustor).

- CFM56-5B1/P engine can be intermixed with CFM56-5B1/2P (DAC IIC Dual Annual Combustor) engine on the same aircraft (AFM Supplement).
- CFM 56-5B/2 "non P" (DAC) engine can be intermixed with CFM 56-5B/2P (DAC II C) engine on the same aircraft (AFM supplement).
- CFM 56-5B/P or / "non P" (SAC) engine can be intermixed with CFM 56-5B/2P (DAC II C) engine on the same aircraft (AFM supplement).

Note 12:

If modification 27640 is embodied on A321-211airplanes, the engine performance and gaseous emission levels are improved. The engine denomination changes to /2P (DAC IIC Dual Annual Combustor).

CFM56-5B3/P engine can be intermixed with CFM56-5B3/2P (DAC IIC Dual Annual Combustor) engine on the same aircraft (AFM Supplement).

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Note 13:

If modification 37147 (Tech insertion program) is embodied in production or 38770 (Tech insertion program for retrofit) is embodied in service on A321 airplanes, the engine performance and gaseous emission levels are improved. The engine denomination changes to /3.

Note 14:

If modification 37868 (Select One Package) is embodied in production or if modification 38554 (Select One Package for Retrofit) is embodied on in-service A321 airplanes the engine performance and gaseous emission levels are improved. The engine denomination itself does not change.

Note 15:

If modification 38573 is embodied in service on A321 airplanes, engine hardware configurations can be intermixed with one CFM56-5Bx/3 SAC (Tech Insertion) and one CFM56-5Bx/P SAC engines.

Note 16:

If modification 34119 is embodied in production on A321 airplanes, CFM56-5B SAC (Single Annular Combustor) and CFM56-5B DAC (Double Annular Combustor) engines can be intermixed on the same aircraft.

Note 17:

Further to "D/E/J Noise" Project approval, from November, 05th, 2009, all A321 airplane/engine configurations are eligible to be in compliance with ICAO Annex 16, Chapter 4 and FAR Part 36, Stage 4 (including Amdt 36-28), except the following:

- A321-111 CFM56-5B1/2P DAC II C WV 008 (mod 30334)
- A321-212 CFM56-5B1/2P DAC II C with or without mod 27772 Weight Variants 000 (Basic) / 001 (mod 28960) / 002 (mod 28721) / 003 (mod 31613) / 011 (mod 32456)
- A321-212 CFM56-5B1/P or CFM56-5B1/3 Weight Variants 001 (mod 28960) / 003 (mod 31613) / 011 (mod 32456)
- A321-213 CFM56-5B2/P or CFM56-5B2/3 with mod 27772 Weight Variants 001 (mod 28960) / 002 (mod 28721) / 003 (mod 31613) / 011 (mod 32456)
- A321-213 CFM56-5B2/P or CFM56-5B2/3 without mod 27772 all Weight Variants
- A321-112 CFM56-5B2/P or CFM56-5B2/3 without mod 27772 all Weight Variants

which are eligible to be in compliance with ICAO Annex 16, Vol. I, Chapter 3 and FAR 36, Stage 3.

Note 18:

From March 31 2008, there is no longer any CFM56-5B1 non /P in field or in production.

Note 19:

If modification 38946 ("BUMP" function) is embodied on models with CFM-5B engines, the engine denomination changes to /P1 (SAC) or /2P1 (DAC) or /3B1 (Tech Insertion).

The engine characteristics defined in this section remain unchanged.

Intermix at aircraft level between "Non Bump" engine and "Bump" engine is not allowed.

Note 20:

If modification 150223 is embodied on A321 airplanes, the aircraft is eligible for a maximum capacity of 183 passengers. The aircraft is fully compliant with:

- FAR121-311 Amdt 121-315,
- Section 25.562 Amendment 25-64 for all passenger seats and flight attendant seats and
- FAA Special Condition 25-375-SC for installation of inflatable restraints.

Note 21:

On series A321-200 equipped with CFM56 engines, introduction of standard of wingbox without dry bay (modification 38616) increases the wing tank fuel capacity by 350 liters.

Note 22:

If Modification 160021 for installation of structural provisions for new large wingtip device (Sharklet) is embodied on A321 airplanes there is no appreciable effect on usable fuel quantities.

Note 23:

If Modification 160023 for installation of new large wingtip devices (Sharklet) is embodied on A321 ariplanes the eco efficiency and payload-range performance is improved. MOD 160023 is approved for WV 000 to WV11. The certification basis is updated as shown above.

Note 24:

If modifications 157272 (MAX PAX) is installed on airplanes with large wingtip devices (Sharklets - Modification 160023), the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 230 passengers.

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Note 25:

Limitations associated with installation of MAX PAX Modification 159115 are referenced in ELOS Memo AT10769IB-T-CS-6 dated May 16, 2017.

Note 26:

If modification 160684 (Alternate climb) is installed on the Model A321-271N/-271NX the engine designation changes to PW1133GA-JM.

Note 27:

If modification 160820 (High altitude thrust increase) is installed on the Model A321-253N the engine designation changes to LEAP-1A35A.

Note 28:

On the A321-251NX, - 252NX, -253NX, 271NX, -272NX up to 3 Additional Center Tanks (ACT) are defined by modification 163213.

Note 29:

If Modifications 159536 (MAX PAX) is installed on airplanes with wing tip fences, the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 230 passengers.

Note 30:

A321-111,-112,-131,-211,-212,-213,-231,-232 models, the embodiment of modification 156130 leads to change the maintenance program and its associated Maintenance Programme Publication Trigger from 48,000FC/60,000FH to 60,000FC/120,000FH (whichever occurs first).

Note 31:

If modification 166872 is embodied on Airbus A321-251NX, -252NX, -253NX, 271NX, -272NX airplanes, the aircraft design is compliant with "Emergency Exit Marking" requirements addressed by paragraph 14 CFR Part 25.811(e)(4). The FAA issued an equivalent level of safety finding memorandum AT11151IB-T-C-5 dated March 19, 2021 for this subject.

Note 32:

If modification 157272 (MAX PAX) is installed on the A321-251N, -252N, -253N, -271N, and -272N models, the airplane is eligible for Maximum Passenger Seating Capacity (MPSC) of 230 passengers.

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DATA PERTINENT TO ALL MODELS

Auxiliary Power Unit (APU)

APU GARRETT

The APU GARRETT AIRESEARCH GTCP 36-300 (A) installation is defined by MOD 20020 (Specification 31-5306B)

APU Pratt & Whitney Rzeszow S.A.

The APU Pratt & Whitney Rzeszow S.A. installation is defined by MOD 22562 or MOD 35864. Pratt & Whitney Rzeszow S.A. APS 3200 (Specification ESR 0802, Rev. A)

APU AlliedSignal

The APU Honeywell International installation is defined by MOD 25888 or 37987 Honeywell International 131-9[A] (Specification 4900 M1E 03 19 01)

APU Limits:

GTCP 36-300 (A)

- Maximum Allowable Speed 69,204 rpm (107 %)

- Maximum Gas Temperature

at turbine outlet (ISA + 35° C)

rated output 638°C overtemp. shutdown 711°C Maximum on starting 1038°C

APS 3200

- Maximum Rotor Speed 49,300 rpm (105 %)

- Maximum EGT 742°C

- Maximum for Start 900°C at altitudes below 25000 ft

982°C at altitudes above 25000 ft

131-9[A]

- Maximum Allowable Speed Nominal 51,728 rpm (106 %)
Overshoot 53,875 rpm (110 %)

Overshoot 53,875 rpm (110 %)
- Maximum Gas Temperature

at turbine outlet 675°C rated output (ISA + 23°C) 585°C

overtemp. shutdown (ISA) 706°C

maximum on starting (ISA) 1080°C below 35000 ft, 1108°C above 35000 ft

(ISA + 40° C) 1090°C below 35000 ft,

1120°C above 35000 ft

APU Approved oils:

See GARRETT Report GT-7800 or in conformity with MIL-L-IAS, MIL-L23699 or DERD 2487 for the GTCP 36-300, Usable Capacity: 5.8 liters

See Pratt & Whitney Maintenance Manual for approved oils for the APS 3200

See Model Specification 31-12048A-3B for Honeywell International 131-9[A]

Center of Gravity Range (% Mean Aerodynamic Chord):

See EASA/DGAC-Approved Airplane Flight Manual, U.S. Version.

Hydraulic Fluids:

- Type IV or Type V Specification NSA 30.7110.
- Capacity (Reservoirs and Systems):

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System	Liters	Gallons
Green	100	26
Yellow	75	20
Blue	60	16

Pressure: $3000 \pm 200 \text{ PSI } (207 \pm 4 \text{ bar})$

Tires:

- See Airbus Service Bulletin (SB) A320-32-1007 for CEO and A320-32-1439 for NEO

Datum:

Station 0 (100 inches forward of fuselage nose).

Reference Mean Aerodynamic Chord (MAC):

165.10 inches / 4.1935 m (leading edge of MAC: Sta. 700.85 inches).

Leveling Means:

Clinometer on the cabin seat track rails.

Service Information:

Each of the documents listed below that contain a statement that it is approved by the European Aviation Safety Agency (EASA) - or for approvals made before September 28, 2003 - by the DGAC France, are accepted by the FAA and are considered FAA approved. Additionally, approvals issued by Airbus under the authority of EASA approved Design Organization EASA.21J.031 - or for approvals made before September 28, 2003 - under the authority of DGAC Design Organization Approval No. C01, or JAA Design Organization Approval No. F.JA.02 are considered FAA approved. These approvals pertain to the type design only.

- Airbus Service bulletins, except as noted below
- Structural repair manuals
- Vendor manuals referenced in Airbus Service Bulletins
- · Aircraft flight manuals, and
- Repair Instructions

Design changes that are contained in Airbus service bulletins and that are classified as Non Basic/Level 1 Major in accordance with either the US/French or US/EASA Bilateral Aviation Safety Agreement Implementation Procedures for Airworthiness must be approved by the FAA.

<u>Historical Transition Statement:</u>

The Direction Generale de l'Aviation Civile (DGAC) of France originally type certified these aircraft under its Type Certificate Number 180. The FAA validated these products under U.S. Type Certificate Number A28NM. Effective September 28, 2003, EASA began oversight of these products on behalf of France under EASA Type Certificate Number EASA.A.064.

Note 1 - Weight and Balance

- a. Current weight and balance report including list of equipment, entitled "Aircraft Inspection Report" included in certificated empty weight, and loading instructions, must be in each aircraft at the time of original certification and at all times thereafter, except in the case of operators having an approved weight control system. Airbus report, "Weight and Balance Manual," contains loading information for each airplane and interior arrangement configuration as delivered. This report contains, or refers to, information relative to location of all passengers and crew member seats, location and capacity of all cargo and baggage compartments, buffets, storage spaces and coat rooms, location and capacity of lounges, lavatories, and the required placards in the passenger compartment.
- b. The airplane must be loaded so that the CG is within specified limits at all times, considering fuel loading usage, gear retraction and movement of crew and passengers from their assigned positions.
- c. The weights of system fuel and oil, as defined below, and hydraulic fluid, all of which must be included in the airplane empty weight, are listed for each airplane in the Weight and Balance Manual specified in paragraph a. above.
- d. System fuel is the weight of all fuel required to fill a lines and tanks up to zero-fuel point on the fuel gauges in the most critical flight attitude, including the unusable tank fuel as defined by FAR part 25.959. (The usable fuel in the crossfeed manifold lines, manifolds, and engine that is not part of the system fuel must be included in the total usable fuel to obtain correct weight and CG for take-off.)

- e. The unusable fuel is that amount of fuel in the tanks which is unavailable to the engines under critical flight conditions as defined in FAR Part 25.959. This "unusable" fuel is included in System Fuel as indicated in paragraph d. above, and need not be accounted for separately.
- f. System oil is the weight of all remaining in the engine, constant speed drive, lines, and tanks after subtracting the oil in the tanks which is above the standpipe (zero gauge) levels. The engine oil capacities shown elsewhere in this data sheet include only the usable oil for which the tanks must be placarded.

Note 2:

The aircraft must be operated in accordance with the DGAC or EASA -approved FAA Airplane Flight Manual. ("DGAC or EASA-approved" is considered equivalent to "FAA-approved".)

Note 3:

A318/A319/A320/A321 Airworthiness Limitations Sections (ALS):

- ALS Part 1 Revision 07, dated November 13, 2019 Safe Life Airworthiness Limitation Items (SL ALI)
- ALS Part 2 Revision 08, dated October 11, 2019 Damage Tolerant Airworthiness Limitation Items (DT ALI).
- ALS Part 3 Revision 07, dated October 11, 2019 Certification Maintenance Requirements (CMR).
- ALS part 4 Revision 07, dated November 07, 2019 System Equipment Maintenance Requirements (SEMR).
- ALS Part 5 Revision 06, dated October 11, 2019 Fuel Airworthiness Limitations.

For all these documents, "EASA-approved" is considered equivalent to "FAA-approved". FAA approved variations to these documents associated with the type design of the airplane are normally included in next scheduled revision cycle by design approval holder (DAH).

Note 4:

If modification 25910 is embodied on A319, A320, and A321 series aircraft, or if modifications 25570 and 25861 are embodied on A319 and A320 series aircraft, or if modifications 25570 and 25952 are embodied on A321 series aircraft, the aircraft is qualified for operation in conditions of reduced vertical separation minimum (RVSM) of 1000 ft between flight levels 290 and 410 using ADIRU 1 and 2 only. If modification 28913 and 31528 are embodied on A319, A320, and A321 series aircraft, the aircraft is qualified for operation in conditions of RVSM using ADIRU 1, and ADIRU 2 or 3. All A318 series aircraft are qualified for operation in conditions of RVSM using ADIRU 1, and ADIRU 2 or 3. This does not constitute operational approval.

Note 5:

ETOPS: The Type Design and Reliability of the airplane-engine combinations listed below have been evaluated in accordance with AC 120-42A or 14 CFR 25.1535 as applicable (see below) and found suitable for Extended Operations (ETOPS) up to 180-minute maximum diversion time, when configured, maintained and operated in accordance with the standards contained in the applicable issue of the approved Airbus CMP document as listed below: referenced:

A318 models: A318-111, A318-112

For these models, the applicable minimum standards are listed in the approved Airbus CMP document referenced "SA/FAA: 14 CFR 25.1535/CMP" at Revision 01 dated January 13th, 2015.

A319 models: A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133

For these models, the applicable minimum standards are listed in the approved Airbus CMP document referenced "SA/FAA: AC 120-42A/CMP" at Revision 01 dated May 01st, 2006.

A320 models: A320-211, A320-212, A320-214, A320-231, A320-232, A320-233For these models, the applicable minimum standards are listed in the approved Airbus CMP document referenced "SA/FAA: AC 120-42A/CMP" at Revision 01 dated May 01st, 2006.

A320 models: A320-216,

For these models, the applicable minimum standards are listed in the approved Airbus CMP document referenced "SA/FAA: 14 CFR 25.1535/CMP" at Revision 04 dated January 12th, 2018.

A320neo models: A320-251N, A320-252N and A320-271N

For these models, the applicable minimum standards are listed in the approved Airbus CMP document referenced "SA/FAA: 14 CFR 25.1535/CMP" at Revision 05 dated January 26, 2018.

A321 models: A321-111, A321-112, A321-211, A321-212, A321-213, A321-131, A321-231, A321-232

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For these models, the applicable minimum standards are listed in the approved Airbus CMP document referenced "SA/FAA: AC 120-42A/CMP" at Revision 01 dated May 01st, 2006.

A321neo models: A321-251N, A321-252N, A321-253N, A321-271N and A321-272N

For these models, the applicable minimum standards are listed in the approved Airbus CMP document referenced "SA/FAA: 14 CFR 25.1535/CMP" at Revision 05 dated January 26, 2018.

A321neo models: A321-251NX, A321-252NX, A321-253NX, A321-271NX and A321-272NX

For these models, the applicable minimum standards are listed in the approved Airbus CMP document referenced "SA/FAA: 14 CFR 25.1535/CMP" at Revision 07 dated August 24, 2018.

This finding does not constitute operational approval to conduct ETOPS.

The ETOPS capability of individual aircraft is managed via the following Airbus modifications:

- Modification 36664: when embodied on A318, A319, A320, andor A321 series aircraft, the aircraft is delivered with ETOPS 180 min capability;
- Modification 36667: when embodied on A318, A319, A320, andor A321 series aircraft, the aircraft is delivered with ETOPS 120 min capability.

Embodiment of these modifications does not constitute an operational approval to conduct ETOPS.

The design of the slide rafts does not allow survival equipment to be attached as required by 25.1415(c). The FAA issued ELOS Memo TD00839IB-T-CI-14 to 25.1415(c) for this subject.

Note 6

If modification 35944 (FADEC Standard "SCN19" for aircraft equipped with IAE engines) or modification 36462 (FADEC Standard "5BM" for aircraft equipped with CFM engines) is embodied the aircraft is eligible for the following improvements of thrust management:

- Derate Take-Off (DTO) capability up to 40% (Modification 35932 (IAE) or Modification 36481 (CFM))
- Flexible Take-Off capability up to 40% (Modification 36750)

Note 7:

If modification 37986 is incorporated on Airbus Model A318, A319, or A320 airplanes, the Head Up Display is activated.

Note 8:

If modification 150700, and 37270 (with CLS option only), 37048 and 36985 are embodied in production on A318, A319, A320, or A321 airplanes, the airplane is compliant with Fuselage Flame Penetration "Burnthrough" requirements addressed by paragraph 14 CFR Part 25.856(b) Amdt 25-111. The FAA issued an equivalent level of safety finding memorandum TD0669IB-T-CI-12 for this subject.

Note 9:

If modification 150628 is embodied on Airbus Model A318, A319, A320 or A321 airplanes, the aircraft design is compliant with the new operating regulation FAR §121.359(j) which requires the compliance to amended FAR 25.1457 implemented by FAA to increase the Solid State Cockpit Voice Recorder (SSCVR) availability. The FAA issued an equivalent level of safety finding memorandum TD0781IB-T-SE-26 for this subject .

Note 10:

If modification 38062 (Fuel Tank Inerting System (FTIS)) is embodied on A318, A319, A320, or A321 airplanes, the airplane is compliant with Part 25 appendix M & N at amendment 25-125, and Section 26.33 at amendment 26-3, and the changes introduced with the FTIS are compliant with 14 CFR Section 25.981(a) & (b) at amendment 25-102. Reference, ELOS memo TD0550IB-T-P-17.

Note 11:

Cabin seats shall conform to the specification ref. 00D252K0004/C01.

Plus technical note SA2521ME1619350 issue 5 (technical note applicable to A321-251NX, -252NX, -253NX, -271NX,-271NX)

Note 12:

If modification 157393 Issue 1 is embodied on Model A318, A319, A320 or A321 series airplanes, the following limitation apply:

"For airplanes equipped with pictograms on exit marking signs and on exit location signs, the cabin crew in charge of the safety briefing must highlight these pictograms to the passengers prior to each takeoff and each landing."

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The FAA issued an equivalent level of safety finding memorandum TD01046IB-T-CS-1 dated October 26, 2015 for this subject.

Note 13:

If Modification 34829 is embodied on Model A319, A320 or A321 series airplanes the no smoking signs are controlled by a software device independent of cockpit switch position and is compliant with Title 14 CFR §25.791 at amendment 25-32 and § 25.791(a) at amendment 25-72. The FAA issued an equivalent level of safety finding/policy memorandum ANM-03-115-05 dated July 07, 2003 for this subject.

Note 14:

If modification 167557 is embodied on Airbus Model A318, A319, A320 or A321 airplanes, the aircraft design is compliant with "Security considerations protection of flightcrew compartment" requirements addressed by paragraph 14 CFR Part 25.795(a)(1). The FAA issued an equivalent level of safety finding memorandum AT11113IB-T-C-4 dated February 22, 2021 for this subject.

Note 15:

For A318, A319 and A320 aircraft equipped with Overwing Exits, the aircraft design is compliant with "Emergency Exit Access" requirements addressed by paragraph 14 CFR Part 25.813(c)(1). The FAA issued an equivalent level of safety finding memorandum CT5555NM-CI-1 dated August 5, 2021 for this subject.

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