

A46NM  
Revision 39  
Airbus

A330-200 Series:  
Models: A330-201, A330-202, A330-203, A330-223, A330-243

A330-200 Freighter Series:  
Models: A330-223F, A330-243F

A330-300 Series:  
Models: A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, A330-343

A330-800 Series:  
Model: A330-841

A330-900 Series:  
Model: A330-941

August 25, 2021

This data sheet which is part of Type Certificate No. A46NM prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the US Federal Aviation Regulations.

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

Airbus A330-201 - approved April 1, 2003  
Airbus A330-202 - approved March 31, 1998  
Airbus A330-203 - approved November 1, 2002  
Airbus A330-223 - approved June 21, 1999  
Airbus A330-243 - approved December 21, 2000

<b>Model:</b>	<b>Definition of Reference Airplane by Airbus Documents:</b>
A330-201	FAA A330-201 Type Design, ref. EAL 415.1338/02 Issue 1, dated November 6, 2002, for type definition
A330-202	FAA A330-202 Type Design, ref. AI/EA-N 415.0531/98 Issue 3, dated May 25, 1998, for type definition and Type Certification Standard Equipment List, ref. 00G000A0102/C0S.
A330-203	FAA A330-203 Type Design, ref. EAL 415.1988/01 Issue 2, dated August 5, 2002, for type definition
A330-223	FAA A330-223 Type Design, ref. AI/EA-N 415.1223/98 Issue 2, dated August 20, 1998, for type definition and Type Certification Standard Equipment List, ref. 00G000A0123/C0S.
A330-243	FAA A330-243 Type Design, ref. AI/EA-N 415.2406/98 Issue 1, dated December 11, 1998, for type definition and Type Certification Standard Equipment List, ref. 00G000A0143/C0S.

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**Engines**

Airplane Model	Engine Model:	Engine Type Certificate:
A330-201	Two GE-CF6-80E1A2 turbojet engines	FAA-Type Certificate E41NE
A330-202	Two GE-CF6-80E1A4 turbojet engines	FAA-Type Certificate E41NE
A330-203	Two GE-CF6-80E1A3 turbojet engines	FAA-Type Certificate E41NE
A330-223	Two PW 4168A turbojet engines	FAA-Type Certificate E36NE
A330-223	Two PW 4168A-1D turbojet engines	FAA-Type Certificate E36NE
A330-223	Two PW 4170 turbojet engines	FAA-Type Certificate E36NE
A330-243	Two RR 772B-60 turbojet engines	FAA-Type Certificate E39NE

Note: A330-223 PW engine mixability and interchangeability configurations is covered by MOD 201487

**Engine Limits**

Engine Limitations	A330-201 CF6-80E1A2 FAA Data Sheet E41NE	A330-202 CF6-80E1A4 FAA Data Sheet E41NE	A330-203 CF6-80E1A3 FAA Data Sheet E41NE
Static Thrust at Sea Level <ul style="list-style-type: none"> <li>Take-off (5 mn)<sup>1</sup> (flat rated 30°C)</li> <li>Max continuous (flat rated 25°C)</li> </ul>	64,530 lbs 60,400 lbs	66,870 lbs 60,400 lbs	68, 530 lbs 60,400 lbs
Maximum Engine Speed <ul style="list-style-type: none"> <li>N1 rpm (%)</li> <li>N2 rpm (%)</li> </ul>	3,835 (115.5%) 11,105 (113%)	3,835 (115.5%) 11,105 (113%)	3,835 (115.5%) 11,105 (113%)
Maximum Gas Temperature <ul style="list-style-type: none"> <li>Take-off (5mn)<sup>1</sup></li> <li>Maximum Continuous</li> <li>Starting<sup>2</sup></li> </ul>	1,787° F (975° C) 1,724° F (940° C) 1,598° F (870° C)	1,787° F (975° C) 1,724° F (940° C) 1,598° F (870° C)	1,787° F (975° C) 1,724° F (940° C) 1,598° F (870° C)
Maximum Oil Temperature (Supply Pump Outlet) °C <ul style="list-style-type: none"> <li>Continuous Operation</li> <li>Transient (15 mn max.)</li> <li>Minimum Oil Pressure (PSI)</li> </ul>	320° F (160° C) 347° F (175° C) 10.0 psid (69 Kpa)	320° F (160° C) 347° F (175° C) 10.0 psid (69 Kpa)	320° F (160° C) 347° F (175° C) 10.0 psid (69 KPa)
Approved oils	Brand Names: See GE Service Bulletin 79-001 Specification: See GE specification D50TF1, Class B		

Engine Limitations	A330-223 PW 4168A / PW 4168A-1D FAA Data Sheet E36NE	A330-223 PW 4170 FAA Data Sheet E36NE	A330-243 RR 772B-60 FAA Data Sheet E39NE
Static Thrust at Sea Level <ul style="list-style-type: none"> <li>Take-off (5 mn)<sup>1</sup> (flat rated 30° C)</li> <li>Max continuous (flat rated 25° C)</li> </ul>	68,600 lbs 59,357 lbs	70,000 lbs 59,357 lbs	71,100 lbs 63,560 lbs
Maximum Engine Speed <ul style="list-style-type: none"> <li>N1 rpm (%)</li> <li>N2 rpm (%)</li> </ul>	3,600 10,450	3,680 10,450	3,861 (99%) 10,611 (100%)
Maximum Gas Temperature <ul style="list-style-type: none"> <li>Take-off (5mn)<sup>1</sup></li> <li>Maximum Continuous</li> <li>Starting<sup>2</sup></li> </ul>	1,148° F (620° C) 1,112° F (600° C) 1,148° F (620° C)	1,148° F (620° C) 1,112° F (600° C) 1,148° F (620° C)	1,652° F (900° C) 1,562° F (850° C) 1,562° F (850° C)
Maximum Oil Temperature (Supply Pump Outlet) °C <ul style="list-style-type: none"> <li>Continuous Operation</li> <li>Transient (15 mn max.)</li> <li>Minimum Oil Pressure (PSI)</li> </ul>	325° F (163° C) 350° F (177° C) 70.0 psid (482.6 KPa )	325° F (163° C) 350° F (177° C) 70.0 psid (482.6 KPa )	374° F (190° C) 374° F (190° C) 24.0 psid
Approved oils	Oils conforming to P&W Turbojet engine Service Bulletin 238, latest revision		Refer to the Engine Operating Instructions for A330/A340 for information on approved oil specifications for Trent700

Table references:

- (1) 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go around).
- (2) 4 consecutive cycles of 2 minutes each.

**Maximum Weight**

Model A330-200 Airplane	A330-201/-202/-203/-223/-243	A330-202/-223/-243	A330-202/-203/-223/-243	A330-201/-202/-203/-223/-243
Weight Variant	020 (Basic) kg / lb	021 (MOD 46892) kg / lb	022 (MOD 47784) kg / lb	023 (MOD 47888) kg / lb
Maximum Take-off Weight, MTOW	230,000 / 507,063	230,000 / 507,063	233,000 / 513,676	233,000 / 513,676
Maximum Landing Weight, MLW	180,000 / 396,831	182,000 / 401,241	182,000 / 401,241	180,000 / 396,831
Maximum Zero Fuel Weight, MZFW	168,000 / 370,376	170,000 / 374,785	170,000 / 374,785	168,000 / 370,376

Model A330-200 Airplane	A330-201/-243	A330-243	A330-203/-243	A330-243
Weight Variant	024 (MOD 49819) kg / lb	025 (MOD 50864) kg / lb	026 (MOD 51712) kg / lb	027 (MOD 54519) kg / lb
Maximum Take-off Weight, MTOW	202,000 / 445,333	220,000 / 485,016	192,000 / 423,287	220,000 / 485,016
Maximum Landing Weight, MLW	180,000 / 396,831	182,000 / 401,241	180,000 / 396,831	180,000 / 396,831
Maximum Zero Fuel Weight, MZFW	168,000 / 370,376	170,000 / 374,785	168,000 / 370,376	168,000 / 370,376

Model A330-200 Airplane	A330-201/-202/-203/-223/-243	A330-203	A330-201/-202/-203/-223/-243	A330-202/-203
Weight Variant	050 (MOD 51802) kg / lb	051 (MOD 51803) kg / lb	052 (MOD 51804) kg / lb	053 (MOD 204437) kg / lb
Maximum Take-off Weight, MTOW	230,000 / 507,063	192,000 / 423,287	233,000 / 513,676	210,000 / 462,970
Maximum Landing Weight, MLW	180,000 / 396,831	180,000 / 396,831	182,000 / 401,241	180,000 / 396,831
Maximum Zero Fuel Weight, MZFW	168,000 / 370,376	168,000 / 370,376	170,000 / 374,785	168,000 / 370,376

Model A330-200 Airplane	A330-201/-202/-203/-223/-243	A330-201/-202/-203/-223/-243	A330-201/-202/-203/-223/-243	A330-201/-202/-203/-223/-243
Weight Variant	054 (MOD 54106) kg / lb	055 (MOD 54107) kg / lb	056 (MOD 55813) kg / lb	057 (MOD 58859) (MOD 201436 retrofit) kg / lb
Maximum Take-off Weight, MTOW	230,000 / 507,063	192,000 / 423,287	233,000 / 513,676	236,000 / 520,291
Maximum Landing Weight, MLW	182,000 / 401,241	182,000 / 401,241	180,000 / 396,831	182,000 / 401,241
Maximum Zero Fuel Weight, MZFW	170,000 / 374,785	170,000 / 374,785	168,000 / 370,376	170,000 / 374,785

Model A330-200 Airplane	A330-201/-202/-203/-223/-243	A330-201/-202/-203/-223/-243	A330-201/-202/-203/-223/-243	A330-201/-202/-203/-223/-243
Weight Variant	058 (MOD 58860) (MOD 201437 retrofit) kg / lb	059 (MOD 57439) kg / lb	060 (MOD 57440) kg / lb	061 (MOD 200561) kg / lb
Maximum Take-off Weight, MTOW	238,000 / 524,700	202,000 / 445,333	220,000 / 485,016	230,000 / 507,063
Maximum Landing Weight, MLW	182,000 / 401,241	182,000 / 401,241	182,000 / 401,241	182,000 / 401,241
Maximum Zero Fuel Weight, MZFW	168,000 / 370,376	170,000 / 374,785	170,000 / 374,785	168,000 / 370,376

Model A330-200 Airplane	A330-201/-202/-203/-223/-243
Weight Variant	062 (MOD 201701) kg / lb
Maximum Take-off Weight, MTOW	238,000 / 524,700
Maximum Landing Weight, MLW	182,000 / 401,241
Maximum Zero Fuel Weight, MZFW	From 168,000 / 370,376 to 170,000 / 374,785 (depending on TOW)

Model A330-200 Airplane	A330-202/-203/- 223/-243	A330-202/-203/- 223/-243	A330-202/-203/- 223/-243	A330-202/-203/- 223/-243
Weight Variant	080 (MOD 203901) kg / lb	081 (MOD 203902) kg / lb	082 (MOD 203904) kg / lb	083 (MOD 203903) kg / lb
Maximum Take-off Weight, MTOW	238,000 / 524,700	242,000 / 533,518	242,000 / 533,518	240,000 / 529,109
Maximum Landing Weight, MLW	182,000 / 401,241	182,000 / 401,241	182,000 / 401,241	182,000 / 401,241
Maximum Zero Fuel Weight, MZFW	170,000 / 374,785	166,000 / 365,967	From 166,000 / 365,967 To 170,000 / 374,785 (depending on TOW)	168,000 / 370,376

### Number of Seats

The maximum number of passengers approved for emergency evacuation is:

- 375 passengers with a 3 pairs of Type A and 1 pair Type 1 exits configuration, and
- 406 passengers with a 4 pairs of Type A exits configuration.

### Maximum Baggage

Cargo Compartment	Maximum Load (kg / lb)
Forward	18,869 / 41,599
Aft	15,241 / 33,600
Rear	3,468 / 7,646

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weight) see weight and Balance Manual:

- A330-200 Airbus Document ref. 00G080A0006/C2S

### Fuel Capacity

3 Tank Airplane						
	Usable Fuel		Unusable Fuel			
			(without MOD 205749)		(with MOD 205749)	
Tank	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)
Wing	91,300 (73,040)	24,119 (161,026)	348 (279)	92 (615)	190 (152)	50 (335)
Center	41,560 (33,248)	10,980 (73,311)	83 (67)	22 (148)	83 (67)	22 (148)
Trim Tank	6,230 (4,984)	1,646 (10,988)	6 (5)	1.6 (11)	6 (5)	1.6 (11)
Total	139,090 (111,272)	36,744 (245,313)	437 (351)	116 (774)	279 (224)	74 (494)

**Certification Basis (A330-200)**

- a. 14CFR part 25 effective February 1, 1965, including the following:
  - Amendments 25-1 through 25-63, Amendments 25-65, 25-66, 25-68, 25-69, 25-73, 25-75, 25-77, 25-78, 25-81, 25-82, 25-84 and 25-85
  - Amendment 25-72 for the following 14 CFR part 25 sections:  
25.21, 25.29, 25.111, 25.147, 25.177, 25.181, 25.205, 25.307, 25.331, 25.341, 25.343, 25.345, 25.351, 25.361, 25.373, 25.395, 25.397, 25.415, 25.459, 25.571 (b), 25.613 (Vertical stabilizer only), 25.615 (Vertical stabilizer only), 25.693, 25.723, 25.729, 25.731, 25.733, 25.735, 25.772, 25.779, 25.783, 25.791, 25.933, 25.979, 25.1093, 25.1381, 25.1419, 25.1522, 25.1533, 25.1543, 25.1551, 25.1581, 25.1583, 25.1587
  - Amendment 25-74 for § 25.851
- b. 14 CFR part 25 Amendment 25-64 with the following exceptions:
  - Cockpit seats will not meet § 25.562 Amendment 25-64 but will meet § 25.561
  - Compliance with § 25.785(a), at Amendment 25-64 for front row seats directly behind a bulkhead will be based on ensuring a 35inch free head strike envelope.
- c. 14 CFR part 34, effective September 10, 1990, including Amendment 34-1.
- d. 14 CFR part 36, effective December 1, 1969, including Amendments 36-1 through 36-21.
- e. Special conditions in accordance with § 21.16.
  1. Special Conditions No. 25-ANM-77 published in the Federal Register on October 19, 1993, (Docket No. NM 86, Special Conditions No. 25-ANM-77) (Special conditions originally written for the A330-300 certification basis that are also included in the A330-200 certification basis):

(1) Operation without Normal Electrical Power	(8) Limit Pilot Forces
(2) Electronic Flight Control System (EFCS) failures and Mode Annunciation	(9) Tail plane Tank Emergency Landing Loads
(3) Command Signal Integrity	(10) Limit Engine Torque
(4) Protection From Lightning and Unwanted Effects of High Intensity Radiated Fields (HIRF)	(11) Flight Characteristics
(5) Interaction of Systems and Structures	(12) Flight Envelope Protection
(6) Design Dive Speed	(13) Side Stick Controllers
(7) Design Maneuver Requirements	(14) Computerized Airplane Flight Manual (AFM) Performance Information
  2. Special Condition 25-281-SC published in the Federal Register on January 6, 2005 (Docket No. NM287): Lower Deck Mobile Crew Rest (LD-MCR) Compartment – Optional modification # 206615.
  3. Special Condition 25-395-SC published in the Federal Register November 03, 2009 (Docket No. NM-418): Seats With Inflatable Lap Belts.
  4. Special Condition 25-400 -SC published in the Federal Register January 4, 2010 (Docket No. NM-424): Seats with Non-Traditional, Large, Non-Metallic Panels.
  5. Special Condition 25-678-SC published in the Federal Register May 26, 2017 (Docket No. FAA-2017-0369): Non-Rechargeable Lithium Batteries  
This Special condition is effective to design changes applied for after May 26, 2017. See the applicability section of this special condition for more information on which design changes must meet it.
  6. Special Condition 25-739-SC published in the Federal Register on December 26, 2018 (Docket No. FAA-2018-1053): Electronic System Security Protection from Unauthorized External Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
  7. Special Condition 25-740-SC published in the Federal Register on December 26, 2018 (Docket No. FAA-2018-1054): Electronic System Security Protection from Unauthorized Internal Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).

- f. The technical requirements are complemented by the following guidance material:

For precision approach and landing,

1. AC 120-29
2. AC 120-28C

and for the automatic flight control system

1. AC 20-57A for automatic landing
2. AC 25.1329-1A for cruise

- g. Equivalent safety findings (ELOS) have been made in accordance with § 21.21(b)(1) for the following sections:

- (1) § 25.335(d) for design airspeeds\*
- (2) § 25.341 for gust loads\*
- (3) § 25.345 for high lift devices\*
- (4) § 25.349 for control surface loads\*
- (5) § 25.351(b) for unsymmetrical loads\*
- (6) § 25.371 for gyroscopic loads\*
- (7) § 25.373 for speed control devices\*
- (8) § 25.391 for control surface loads \*

\*These ELOS findings do not apply where the corresponding requirements of Amendment 25-141 are applied.

- (9) §§ 25.101(I); 25.105(c)(1); 25.109(a)(b)(c)(d)(e)(f); 25.113(a)(b)(c); 25.115(a); 25.735(f)(g)(h)(b) for rejected takeoff and landing performance
- (10) §§ 25.933(a)(1)(ii), 25.1309(b)(1) for flight critical thrust reverser
- (11) § 25.1203(d) for turbine overheat detection (RR Trent 700 powered A330-243 only)
- (12) § 25.1305(c)(6) Warning means for engine fuel filter contamination (RR Trent 700 powered A330-243 only)
- (13) §§ 25.1305; 25.1501(b) for APU system flight deck instrumentation
- (14) § 25.856(b), Improved Flammability standards for Thermal/acoustic insulation materials (documented in ELOS Memo TD0609IB-T-CI-5; Memo TD0609IB-T-CI-6 and Memo TD0609IB-T-CI-7).
- (15) § 25.785(d), Forward Facing Seat, over 18 degrees to aircraft centerline (documented in ELOS Memo TD0643IB-T-CI-9).
- (16) § 25.1457(d)(5) Cockpit Voice Recorder – Equivalent Level of Safety for 10 minute independent backup power requirement (documented in ELOS Memo TD0774IB-T-SA-1).
- (17) §§ 26.33, 26.35 Fuel Center Tank Flammability Reduction System (documented in ELOS Memo TD0547IB-T-P-1)
- (18) § 25.981(a)(3) Amendment. 25-102 Installation of Fuel Pump Ground Fault Interrupter (GFI) Devices (documented in ELOS Memo TD0764IB-T-P-1)
- (19) § 25.1443(c) Minimum mass flow of supplemental oxygen on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-1)
- (20) § 25.1441(c) Crew determination of quantity of oxygen in passenger oxygen system on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-2)
- (21) §§ 25.811(g); 25.812(b)(1) Symbolic Exit Signs on Models A330 and A340 airplanes (documented in ELOS Memo TD00918IB-T-CS-1). For airplanes equipped with pictograms on exit marking signs and on exit location signs, the cabin crew in charge of the safety briefing should highlight these pictograms to the passengers prior to each takeoff and each landing.
- (22) § 25.811(e)(4) Emergency Exit Marking on model A330 and A340 airplanes (documented in ELOS Memo AT10899IB-T-CS-1) for airplanes with Airbus modification # 206893.

- h. Optional requirements elected:

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

- i. Exemptions:

- Exemption No. 17129 dated October 26, 2016. This Exemption from 14 CFR 25.98 l(a)(3) is granted to Airbus as it relates to the Model A330-200 fuel trim tank structural lightning protection (Airbus modification # 204495 “Stabilizers – Horizontal Stabilizer – Define lateral box for weight reduction”).
- Exemption No. 17601, dated October 13, 2017. This exemption is granted for the requirements of 14 CFR part 25, appendix K, section K25.1.4(a)(2) as they relate to concurrent power of the fuel boost pumps in each main fuel tank and will allow to show that the airplanes are capable of continuously providing fuel pressure to all engines when only powered by an

independent electrical power source other than the three power sources required in section K25.1.3(b) of appendix K, without maintaining simultaneous power to all individual fuel boost pumps. This exemption relates to Model A330 series airplanes ETOPS beyond 180 minutes approval.

The Direction Generale de l'Aviation Civile (DGAC) of France originally type certificated the Airbus Model A330-200 series airplanes under its type certificate number DGAC-F TC 184. The FAA validated this product under U.S. Type Certificate Number A46NM. Effective September 28, 2003, the European Union Aviation Safety Agency (EASA) began oversight of this product on behalf of DGAC.

**Part 26 – Continued Airworthiness and Safety Improvements for Transport Category Airplanes:**

Based on § 21.29(a) for new import TCs, or § 21.101(g) for changes to TCs, applicable provisions of part 26 are included in the certification basis. For any future part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.

**FAA Required Modification List**

Compliance with the FAA Required Modification List for Airbus Model A330-200 Aircraft as included under the Import Requirements section of TCDS Revision 4, dated March 21, 2000 or later TCDS revision is necessary for an A330-200 aircraft to be found in a condition for safe operation. The FAA has accepted:

- Model A330-223 aircraft in the Airbus as-delivered configuration for MSN 343 and from MSN 609 and on as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letters EAL G03D0415493, dated July 9, 2004, and G01ME1249802 Issue 2, dated July 26, 2012) that the RML modifications applicable to model A330-223 aircraft are either part of the FAA approved type design (ref. AI/EA-N 415.1223/98 Issue 2, dated August 20, 1998), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-223 aircraft at time of delivery.
- Model A330-202 aircraft in the Airbus as-delivered configuration (except for MSN's 205, 211, 269 and 272) as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL LR01M08013880, dated June 20, 2008) that the RML modifications applicable to model A330-202 aircraft are either part of the FAA approved type design (ref. AI/EA-N 415.0531/98 Issue 3, dated May 25, 1998), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-202 aircraft at time of delivery.
- Model A330-243 aircraft in the Airbus as-delivered configuration (except for MSN's 248, 250, 251, 254, 261, 265, 271 and 276) as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL LR01M0819406, dated August 07, 2008) that the RML modifications applicable to model A330-243 aircraft are either part of the FAA approved type design (ref. AI/EA-N 415.2406/98 Issue 1, dated December 11, 1998), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-243 aircraft at time of delivery.

**Equipment**

- The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.
- The following Airbus Documents defines the set of modifications which comprise the FAA certificated type design. These documents contain certain modifications determined necessary for FAA certification, including installation of ozone converters, fuel system improvements and thrust reverser modifications.
  - A330-201: EAL 415.1338/02 Issue 1, dated November 6, 2002
  - A330-202: AI/EA-N 415.0531/98 Issue 3, dated May 25, 1998
  - A330-203: AI/EAL 415.1988/01 Issue 2, dated August 5, 2001
  - A330-223: AI/EA-N 415.1223/98 Issue 2, dated August 20, 1998
  - A330-243: AI/EA-N 415.2406/98 Issue 1, dated December 11, 1998
- Equipment approved for installation is listed in the Certification Standard Equipment List
  - A330-202: 00G000A0102/C0S
  - A330-223: 00G000A0123/C0S
  - A330-243: 00G000A0143/C0S
- Cabin furnishings, equipment and arrangement shall conform to the following specification:
  - 00F252K0005/C01 for cabin seats,
  - 00F252K0006/C01 for galley,
  - 00F252K0020/C01 for cabin attendant seat

**Airplane Flight Manual**

Airplane operation must be in accordance with the EASA Approved Airplane Flight Manual (AFM), US version, listed below, or later EASA approved revision applicable to the specific airplane model, modification status and serial number.

<b>Model A330-200</b>	<b>Airbus Document Reference</b>	<b>Revision No.</b>	<b>Date</b>
-201	STL 33000	1	March 10, 2003
-202	AI/ST-F 33000	2	January 6, 1999
-203	AI/ST-F 33000	1	October 24, 2002
-223	AI/ST-F 33000	2	January 6, 1999
-243	AI/ST-F 33000	2	March 15, 2000

**Data Pertinent to All Model**

**See Section VI, Data Pertinent to All Model A330-200, A330-200 Freighter, A330-300, A330-800 and A330-900 Series airplanes.**  
For information on Fuel, Airspeed Limits, Center of Gravity Limits, Datum, Leveling Means, Minimum Crew, Maximum Operating Altitude, Control Surface Movements, Production Basis, Hydraulic Fluids, Auxiliary Power Unit (APU), Tires, Environmental requirements for noise, Manufacturer's Serial Numbers, Service Information, information on Import Requirements and General Notes



**II. Type A330-200 Freighter Series Transport Category Airplanes:****Airbus A330-223F - approved August 12, 2010****Airbus A330-243F - approved August 12, 2010**

Model:	Definition of Reference Airplane by Airbus Documents:
A330-223F	FAA A330-223F Type Design, ref. AI/EA-LR01D10010034 Issue 3, dated August 03, 2010, for type definition.
A330-243F	FAA A330-243F Type Design, ref. AI/EA-LR01D10010035 Issue 3, dated August 03, 2010, for type definition.

**Engines**

Airplane Model	Engine Model:	Engine Type Certificate:
A330-223F	Two PW 4170 turbojet engines Two PW 4168A-1D turbojet engines (MOD # 58344 Issue 3)	FAA-Type Certificate E36NE
A330-243F	Two RR 772B-60 turbojet engines	FAA-Type Certificate E39NE

**Engine Limits**

Engine Limitations	A330-223F PW 4170 FAA Data Sheet E36NE	A330-223F PW 4168A-1D FAA Data Sheet E36NE	A330-243F RR 772B-60 FAA Data Sheet E39NE
Static Thrust at Sea Level <ul style="list-style-type: none"> <li>Take-off (5 mn)<sup>1</sup> (flat rated 30°C)</li> <li>Max continuous (flat rated 25°C)</li> </ul>	70,000 lbs 59,357 lbs	68,600 lbs 59,357 lbs	71,100 lbs 63,560 lbs
Maximum Engine Speed <ul style="list-style-type: none"> <li>N1 rpm (%)</li> <li>N2 rpm (%)</li> </ul>	3,680 10,450	3,600 10,450	3,861 (99%) 10,611 (100%)
Maximum Gas Temperature <ul style="list-style-type: none"> <li>Take-off (5mn)<sup>1</sup></li> <li>Maximum Continuous</li> <li>Starting<sup>2</sup></li> </ul>	1,148° F (620° C) 1,112° F (600° C) 1,148° F (620° C)	1,148° F (620° C) 1,112° F (600° C) 1,148° F (620° C)	1,652° F (900° C) 1,562° F (850° C) 1,562° F (850° C)
Maximum Oil Temperature (Supply Pump Outlet) °C <ul style="list-style-type: none"> <li>Continuous Operation</li> <li>Transient (15 mn max.)</li> <li>Minimum Oil Pressure (PSI)</li> </ul>	325° F (163° C) 350° F (177° C) 70.0 psid (482.6 KPa )	325° F (163° C) 350° F (177° C) 70.0 psid (482.6 KPa )	374° F (190° C) 374° F (190° C) 24.0 psid
Approved oils	Oils conforming to P&W Turbojet engine Service Bulletin 238, latest revision.		Refer to the Engine Operating Instructions for A330/A340 for information on approved oil specifications for Trent700

Table references:

(1) 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go around).

(2) 4 consecutive cycles of 2 minutes each.

**Maximum Weight**

Model A330-200 Freighter Airplane	A330-223F/-243F	A330-223F/-243F	A330-223F/-243F
Weight Variant	000 (Range Mode) kg / lb	001 (Payload Mode) kg / lb	002 (Dynamic payload) kg / lb
Maximum Take-off Weight, MTOW	233,000 / 513,676	227,000 / 500,449	233,000 / 513,676
Maximum Landing Weight, MLW	182,000 / 401,241	187,000 / 412,264	187,000 / 412,264
Maximum Zero Fuel Weight, MZFW	173,000 / 381,399	178,000 / 392,422	From 173,000 / 381,399 to 178,000 / 392,422 (depending on TOW)

**Number of Seats**

A maximum of 12 supernumeraries may occupy the courier area located aft of the flight deck compartment.  
The total occupancy of the airplane is limited to 16 persons including flight crew.

**Maximum Baggage**

<b>Cargo Compartment</b>	<b>Maximum Load (kg / lb)</b>
Forward	18,869 / 41,606
Aft	15,241 / 33,606
Rear	3,468 / 7,646
MDC Compartment	64,000 / 141,119 (range mode)

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weight) see weight and Balance Manual:

A330-200F      Airbus Document ref. 00G080A0006/C2S

**Fuel Capacity**

	<b>3 Tank Airplane</b>					
	<b>Usable Fuel</b>		<b>Unusable Fuel</b>			
			<b>(without MOD 205749)</b>		<b>(with MOD 205749)</b>	
Tank	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)
Wing	91,300 (73,040)	24,119 (161,026)	348 (279)	92 (615)	190 (152)	50 (335)
Center	41,560 (33,248)	10,980 (73,311)	83 (67)	22 (148)	83 (67)	22 (148)
Trim Tank	6,230 (4,984)	1,646 (10,988)	6 (5)	1.6 (11)	6 (5)	1.6 (11)
Total	139,090 (111,272)	36,746 (245,313)	437 (351)	116 (774)	279 (224)	74 (494)

**Certification Basis (A330-200 Freighter)**

- a. 14 CFR part 25 effective February 1, 1965, including the following:
- Amendments 25-1 through 25-63, Amendments 25-65, 25-66, 25-68, 25-69, 25-73, 25-75, 25-77, 25-78, 25-81, 25-82, 25-84, 25-85, 25-99 and 25-105
  - Amendment 25-72 for the following 14 CFR part 25 sections:  
§ 25.21, 25.29, 25.111, 25.147, 25.177, 25.181, 25.205, 25.307, 25.361, 25.373, 25.395, 25.397, 25.415, 25.459, 25.571 (b), 25.613 (Vertical stabilizer only), 25.615 (Vertical stabilizer only), 25.625 (Courier area), 25.693, 25.723, 25.729, 25.731, 25.733, 25.735, 25.772, 25.779, 25.783, 25.791 (Courier area), 25.803 (Courier area), 25.810 (Courier area), 25.933, 25.979, 25.1093, 25.1381, 25.1419, 25.1522, 25.1533, 25.1543, 25.1551, 25.1581, 25.1583, 25.1587
  - Amendment 25-74 for § 25-851 for Main Deck Cargo Compartment and courier area
  - Amendment 25-80 for § 25.1316 for Main Deck Cargo Compartment, Main Deck Cargo Door
  - Amendment 25-86 for §§ 25.305, 25.321, 25.331, 25.333, 25.335, 25.341, 25.343, 25.345, 25.349, 25.351, 25.371, 25.373, 25.391, 25.427
  - Amendment 25-88 for §§ 25.783, 25.785, 25.811 for courier area
  - Amendment 25-91 for § 25.561 for barrier wall, supernumerary seats and attachments
  - Amendment 25-93 for §§ 25.857, 25.858 for the Main Deck Cargo Compartment
  - Amendment 25-111 for § 25.856(a)
  - Amendment 25.112 for § 25.613 for Main Deck Cargo Door, barrier wall, Main Deck Cargo Compartment
  - Amendment 25.113 for §§ 25.869, 25.1353, 25.1431 for Main Deck Cargo Compartment, Courier area
  - Amendment 25-114 for § 25.783 for Main Deck Cargo Door
  - Amendment 25-114 for §§ 25.807, 25.809, 25.820 for Courier area

- Amendment 25-115 for § 25.1439 for courier area
- Amendment 25-116 for §§ 25.853, 25.855 for Main Deck Cargo Compartment
- Amendment 25-116 for §§ 25.812, 25.813, 25.853, 25.1411, 25.1447 for Courier area
- Amendment 25-122 for § 25.1317

**Note:**

The class E cargo compartment on the A330-200F is required to ensure protection of critical systems and equipment from the fire itself and from the residual heat after the airplane has been depressurized (see FAA Advisory Circular (AC) 25-9a). The following design details must be maintained to ensure that at an unsafe design feature is not present: Critical systems located in the main deck Class E cargo compartment must be protected from cargo fires occurring therein and the associated effects. Critical systems include, but are not limited to, flight controls, critical wiring, and windows (if loss of a window could contribute to loss of suppression capability). The flight data recorder and the cockpit voice recorder should also be protected for subsequent investigative purposes if they are installed in the affected cargo compartment. If protective covers are used, they must be constructed of materials that meet the flame penetration resistance requirements of 14 CFR part 25, Appendix F, part III at Amendment 25-60.

- b. 14 CFR part 25 Amendment 25-64 with the following exceptions:
  - Cockpit seats will not meet § 25.562 Amendment 25-64 but will meet § 25.561
  - Compliance with § 25.785(a), at Amendment 25-64 for front row seats directly behind a bulkhead will be based on ensuring a 35inch free head strike envelope.
- c. 14 CFR part 34, effective September 10, 1990, including Amendment 34-1.
- d. 14 CFR part 36, effective December 1, 1969, including Amendments 36-1 through 36-28.
- e. Special conditions in accordance with § 21.16.
  1. The following special conditions published in the Federal Register April 15, 1993, (Docket No. NM-75, Special Conditions No. 25-ANM-69) are part of the original A330-200 certification basis and remain applicable to A330-200F:
 

(1) Operation without Normal Electrical Power	(8) Limit Pilot Forces
(2) Electronic Flight Control System (EFCS) failures and Mode Annunciation	(9) Tail plane Tank Emergency Landing Loads
(3) Command Signal Integrity	(10) Limit Engine Torque
(4) Protection From Lightning and Unwanted Effects of High Intensity Radiated Fields (HIRF)	(11) Flight Characteristics
(5) Interaction of Systems and Structures	(12) Flight Envelope Protection
(6) Design Dive Speed	(13) Side Stick Controllers
(7) Design Maneuver Requirements	(14) Computerized Airplane Flight Manual (AFM) Performance Information
  2. Special Condition 25-678-SC published in the Federal Register May 26, 2017 (Docket No. FAA-2017-0369):  
Non-Rechargeable Lithium Batteries  
This Special condition is effective to design changes applied for after May 26, 2017. See the applicability section of this special condition for more information on which design changes must meet it.
  3. Special Condition 25-739-SC published in the Federal Register on December 26, 2018 (Docket No. FAA-2018-1053):  
Electronic System Security Protection from Unauthorized External Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
  4. Special Condition 25-740-SC published in the Federal Register on December 26, 2018 (Docket No. FAA-2018-1054):  
Electronic System Security Protection from Unauthorized Internal Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
- f. The technical requirements are complemented by the following guidance material:  
For precision approach and landing,
  1. AC 120-29
  2. AC 120-28C
 and for the automatic flight control system

## 2. AC 25.1329-1A for cruise

## g. Equivalent safety findings:

The following Equivalent safety findings (ELOS) are part of the original A330-200 certification basis and remain applicable to the A330-200F:

- (1) §§ 25.101(i); 25.105(c)(1); 25.109(a)(b)(c)(d)(e)(f); 25.113(a)(b)(c); 25.115(a); 25.735(f)(g)(h)(b) for rejected takeoff and landing performance
- (2) §§ 25.933(a)(1)(ii), 25.1309(b)(1) for flight critical thrust reverser
- (3) § 25.1203(d) for turbine overheat detection (RR Trent 700 powered A330-243F only)
- (4) § 25.1305(c)(6) Warning means for engine fuel filter contamination (RR Trent 700 powered A330-243F only)
- (5) §§ 25.1305; 25.1501(b) for APU system flight deck instrumentation
- (6) § 25.981(a)(3) Amendment. 25-102 Installation of Fuel Pump Ground Fault Interrupter (GFI) Devices (documented in ELOS Memo TD0764IB-T-P-1)
- (7) § 25.1457(d)(5) Cockpit Voice Recorder – Equivalent Level of Safety for 10 minute independent backup power requirement (documented in ELOS Memo TD0774IB-T-SA-1)
- (8) § 25.1443(c) Minimum mass flow of supplemental oxygen on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-1)
- (9) § 25.1441(c) Crew determination of quantity of oxygen in passenger oxygen system on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-2)

## h. Optional requirements elected:

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

## i. Exemptions:

- Exemption No. 9894 corrected (partial), dated July 01, 2009. As related to §§ 25.785(j), 25.813(b), 25.857(e) and 25.1447(c)(1). This exemption was granted to the extent necessary to allow carriage of supernumeraries, but limits the supernumeraries' Class E cargo compartment access to specific types of operation. The total occupancy of the airplane is limited to sixteen persons, including the flight crew (two on-duty flight crew members, and up to fourteen off-duty flight crew members, observers or supernumeraries).
- Exemption No. 17129 dated October 26, 2016. This Exemption from 14 CFR 25.98 l(a)(3) is granted to Airbus as it relates to the Model A330-200 fuel trim tank structural lightning protection (Airbus modification # 204495 “Stabilizers – Horizontal Stabilizer – Define lateral box for weight reduction”).

## j. 14 CFR part 26 effective December 10, 2007, including Amendment 26-1.

Part 26 – Continued Airworthiness and Safety Improvements for Transport Category Airplanes:

Based on § 21.29(a) for new import TCs, or § 21.101(g) for changes to TCs, applicable provisions of part 26 are included in the certification basis. For any future part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.

**FAA Required Modification List**

Compliance with the FAA Required Modification List for Airbus Model A330-200 Aircraft as included under the Import Requirements section of TCDS Revision 4, dated March 21, 2000 or later TCDS revision is necessary for an A330-200 aircraft to be found in a condition for safe operation. The FAA has accepted:

- Models A330-223F and A330-243F aircraft in the Airbus as-delivered configuration as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EIA\_LR02M13000541 issue 2, dated January 09, 2013 for A330-223F and EIA\_LR02M12055271, dated December 11, 2012 for A330-243F) that the RML modifications applicable to models A330-223F and A330-243F aircraft are part of the FAA approved type design (ref. EIA\_LR01D10010034 issue 3, dated August 03, 2010 for A330-223F and EIA\_LR01D10010035 issue 3, dated August 03, 2010 for A330-243F).

**Equipment**

- The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.
- Cabin furnishings, equipment and arrangement shall conform to the following specification:
  - 00F252K0005/C01 for cabin seats,
  - 00F252K0006/C01 for galley,
  - 00F252K0020/C01 for cabin attendant seat

**Airplane Flight Manual**

Airplane operation must be in accordance with the EASA Approved Airplane Flight Manual (AFM), US version, listed below, or later EASA approved revision applicable to the specific airplane model, modification status and serial number.

Model A330-200F	Airbus Document Reference	Revision No.	Date
-223F	STL 33000	1	April 08, 2010
-243F	STL 33000	1	April 08, 2010

**Data Pertinent to All Model**

**See Section VI, Data Pertinent to All Model A330-200, A330-200 Freighter, A330-300, A330-800 and A330-900 Series airplanes.**

For information on Fuel, Airspeed Limits, Center of Gravity Limits, Datum, Leveling Means, Minimum Crew, Maximum Operating Altitude, Control Surface Movements, Production Basis, Hydraulic Fluids, Auxiliary Power Unit (APU), Tires, Environmental requirements for noise, Manufacturer's Serial Numbers, Service Information, information on Import Requirements and General Notes

### III. Airbus A330-300 Series Transport Category Airplanes

Airbus A330-301 - approved October 21, 1993

Airbus A330-302 - approved November 13, 2007

Airbus A330-303 - approved November 13, 2007

Airbus A330-321 - approved June 21, 1999

Airbus A330-322 - approved June 21, 1999

Airbus A330-323 - approved October 8, 1999

Airbus A330-341 - approved December 21, 2000

Airbus A330-342 - approved December 21, 2000

Airbus A330-343 - approved December 21, 2000

<b>Model:</b>	<b>Definition of Reference Airplane by Airbus Documents:</b>
A330-301	FAA A330-301 Type Design, ref. AI/EA-N 415.1181/96 Issue 3, dated July 16, 1997 for type definition and Type Certification Standard Equipment list, ref. 00G000A0101/C0S.
A330-321	FAA A330-321 Type Design, ref. AI/EA-N 415.1184/96 Issue 3, dated June 25, 1998 for type definition and Type Certification Standard Equipment list, ref. 00G000A0121/C0S.
A330-302	FAA A330-302 Type Design, ref. EAL M05000400 Issue 03 dated May 2006 for type definition
A330-303	FAA A330-303 Type Design, ref. EAL M05000401 Issue 03 dated May 2006 for type definition
A330-322	FAA A330-322 Type Design, ref. AI/EA-N 415.1183/99 Issue 3, dated June 25, 1998 for type definition and Type Certification Standard Equipment list, ref. 00G000A0121/C0S.
A330-323	FAA A330-323 Type Design, ref. AI/EA-N 415.1630/99 Issue 1, dated July 20, 1999 for type definition and Type Certification Standard Equipment list, ref. 00G000A0123/C3S.
A330-341	FAA A330-341 Type Design, ref. AI/EA-N 415.1187/96 Issue 2, dated December 11, 1998 for type definition and Type Certification Standard Equipment list, ref. 00G000A0141/C0S.
A330-342	FAA A330-341 Type Design, ref. AI/EA-N 415.1182/96 Issue 2, dated December 11, 1998 for type definition and Type Certification Standard Equipment list, ref. 00G000A0141/C0S.
A330-343	FAA A330-343 Type Design, ref. AI/EA-N 415.2027/99 Issue 1, dated October 22, 1999 for type definition and Type Certification Standard Equipment list, ref. 00G000A0143/C3S.

### Engines

<b>Airplane Model:</b>	<b>Engine Model:</b>	<b>Engine Type Certificate:</b>
A330-301	Two GE-CF6-80E1A2 turbojet engines	FAA-Type Certificate E41NE
A330-321	Two PW 4164 turbojet engines	FAA-Type Certificate E36NE
A330-321	Two PW4164-1D turbojet engines	FAA Type Certificate E36NE
A330-302	Two GE-CF6-80E1A4 turbojet engines	FAA-Type Certificate E41NE
A330-303	Two GE-CF6-80E1A3 turbojet engines	FAA-Type Certificate E41NE
A330-322	Two PW 4168 turbojet engines	FAA-Type Certificate E36NE
A330-322	Two PW 4168-1D turbojet engines	FAA Type Certificate E36NE
A330-323	Two PW 4168A turbojet engines	FAA-Type Certificate E36NE
A330-323	Two PW 4168A-1D turbojet engines	FAA-Type Certificate E36NE
A330-323	Two PW 4170 turbojet engines	FAA-Type Certificate E36NE
A330-341	Two RR Trent 768-60 turbojet engines	FAA-Type Certificate E39NE
A330-342	Two RR Trent 772-60 turbojet engines	FAA-Type Certificate E39NE
A330-343	Two RR Trent 772B-60 turbojet engines	FAA-Type Certificate E39NE

Note: A330-321/-322/-323 PW engine Mixability and interchangeability configurations are covered by MOD 201487

### Engine Limits

<b>Engine Limitations</b>	<b>A330-301 CF6-80E1A2 FAA Data Sheet E41NE</b>	<b>A330-302 CF6-80E1A4 FAA Data Sheet E41NE</b>	<b>A330-303 CF6-80E1A3 FAA Data Sheet E41NE</b>
Static Thrust at Sea Level <ul style="list-style-type: none"> <li>• Take-off (5 mn)<sup>1</sup> (flat rated 30°C)</li> <li>• Max continuous (flat rated 25°C)</li> </ul>	64,530 lbs 60,400 lbs	66,870 lbs 60,400 lbs	68,530 lbs 60,400 lbs
Maximum Engine Speed <ul style="list-style-type: none"> <li>• N1 rpm (%)</li> <li>• N2 rpm (%)</li> </ul>	3,835 (115.5%) 11,105 (113%)	3,835 (115.5%) 11,105 (113%)	3,835 (115.5%) 11,105 (113%)
Maximum Gas Temperature <ul style="list-style-type: none"> <li>• Take-off (5mn)<sup>1</sup></li> <li>• Maximum Continuous</li> <li>• Starting<sup>2</sup></li> </ul>	1,787° F (975° C) 1,724° F (940° C) 1,598° F (870° C)	1,787° F (975° C) 1,724° F (940° C) 1,598° F (870° C)	1,787° F (975° C) 1,724° F (940° C) 1,598° F (870° C)

Engine Limitations	A330-301 CF6-80E1A2 FAA Data Sheet E41NE	A330-302 CF6-80E1A4 FAA Data Sheet E41NE	A330-303 CF6-80E1A3 FAA Data Sheet E41NE
Maximum Oil Temperature (Supply Pump Outlet) °C			
• Continuous Operation	320° F (160° C)	320° F (160° C)	320° F (160° C)
• Transient (15 mn max.)	347° F (175° C)	347° F (175° C)	347° F (175° C)
• Minimum Oil Pressure (PSI)	10.0 psid (69 KPa )	10.0 psid (69 KPa )	10.0 psid (69 KPa )
Approved oils	See SB CFMI 79-001 or GE specification D50TF1 Class B		

Engine Limitations	A330-321 PW 4164 PW 4164-1D FAA Data Sheet E36NE	A330-322 PW 4168 PW 4168-1D FAA Data Sheet E36NE	A330-323 PW 4168A PW 4168A-1D FAA Data Sheet E36NE	A330-323 PW 4170 FAA Data Sheet E36NE
Static Thrust at Sea Level				
• Take-off (5 mn) <sup>1</sup> (flat rated 30°C)	64,500 lbs	68,600 lbs	68,600 lbs	70,000 lbs
• Max continuous (flat rated 25°C)	55,800 lbs	59,357 lbs	59,357 lbs	59,357 lb
Maximum Engine Speed				
• N1 rpm (%)	3,600 (101%)	3,600 (101%)	3,600 (101%)	3,680 (101%)
• N2 rpm (%)	10,450 (103%)	10,450 (103%)	10,450 (103%)	10,450 (103%)
Maximum Gas Temperature				
• Take-off (5mn) <sup>1</sup>	1,148° F (620° C)	1,148° F (620° C)	1,148° F (620° C)	1,148° F (620° C)
• Maximum Continuous	1,112° F (600° C)	1,112° F (600° C)	1,112° F (600° C)	1,112° F (600° C)
• Starting <sup>2</sup>	1,148° F (620° C)	1,148° F (620° C)	1,148° F (620° C)	1,148° F (620° C)
Maximum Oil Temperature (Supply Pump Outlet) °C				
• Continuous Operation	325° F (163° C)	325° F (163° C)	325° F (163° C)	325° F (163° C)
• Transient (15 mn max.)	350° F (177° C)	350° F (177° C)	350° F (177° C)	350° F (177° C)
• Minimum Oil Pressure (PSI)	70 psid (482.6 KPa)	70 psid (482.6 KPa)	70 psid (482.6 KPa)	70 psid (482.6 KPa)
Approved oils	See P&W Service Bulletin 238, latest revision.			

Engine Limitations	A330-341 Trent 768-60 FAA Data Sheet E39NE	A330-342 Trent 772-60 FAA Data Sheet E39NE	A330-343 Trent 772B-60 FAA Data Sheet E39NE
Static Thrust at Sea Level			
• Take-off (5 mn) <sup>1</sup> (flat rated 30°C)	67,500 lbs	71,100 lbs	71,100 lbs
• Max continuous (flat rated 25°C)	60,410 lbs	63,560 lbs	63,560 lbs
Maximum Engine Speed			
• N1 rpm (%)	3,861 (99%)	3,861 (99%)	3,861 (99%)
• N2 rpm (%)	10,611 (100%)	10,611 (100%)	10,611 (100%)
Maximum Gas Temperature			
• Take-off (5mn) <sup>1</sup>	1,652° F (900° C)	1,652° F (900° C)	1,652° F (900° C)
• Maximum Continuous	1,562° F (850° C)	1,562° F (850° C)	1,562° F (850° C)
• Starting <sup>2</sup>	1,562° F (850° C)	1,562° F (850° C)	1,562° F (850° C)
Maximum Oil Temperature (Supply Pump Outlet) °C			
• Continuous Operation	374° F (160° C)	374° F (160° C)	374° F (160° C)
• Transient (15 mn max.)	374° F (175° C)	374° F (175° C)	374° F (175° C)
• Minimum Oil Pressure (PSI)	24.0 psid	24.0 psid	24.0 psid
Approved oils	Refer to the Engine Operating Instructions for A330/A340 for information on approved oil specifications for Trent 700		

Table references:

- (1) 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go-around).
- (2) 4 consecutive cycles of 2 minutes each.

**Maximum Weight**

<b>Model A330-300 Airplane</b>	<b>A330-301</b>		<b>A330-301/-321/-322/-341/-342</b>	
Weight Variant	001 (MOD 42200) kg / lb	000 (Basic) kg / lb	002 (MOD 42600) kg / lb	003 (MOD 44270) kg / lb
Maximum Take-off Weight, MTOW	184,000 / 405,650	212,000 / 467,397	212,000 / 467,397	215,000 / 473,993
Maximum Landing Weight, MLW	174,000 / 383,604	174,000 / 383,604	177,000 / 390,218	177,000 / 390,218
Maximum Zero Fuel Weight, MZFW	164,000 / 361,558	164,000 / 361,558	167,000 / 368,171	167,000 / 368,171

<b>Model A330-300 Airplane</b>	<b>A330-301/-321/-322/-341/-342</b>	
Weight Variant	004 (MOD 44849) kg / lb	010 (MOD 43308) kg / lb
Maximum Take-off Weight, MTOW	215,000 / 473,993 (*) 209,000 / 460,765	217,000 / 478,402
Maximum Landing Weight, MLW	182,000 / 401,241 (*) 177,000 / 390,218	179,000 / 394,627
Maximum Zero Fuel Weight, MZFW	172,000 / 379,194 (*) 167,000 / 368,171	169,000 / 372,581

(\*) Linear variation between those weights

<b>Model A330-300 Airplane</b>	<b>A330-321/-322/-341/-342</b>		<b>A330-341/-342</b>	
Weight Variant	011 (MOD 44803) kg / lb	012 (MOD 45086) kg / lb	013 (MOD 46688) kg / lb	014 (MOD 48377) kg / lb
Maximum Take-off Weight, MTOW	212,000 / 467,397	218,000 / 480,607	215,000 / 473,993	205,000 / 451,947
Maximum Landing Weight, MLW	177,000 / 390,218	182,000 / 401,241	177,000 / 390,218	182,000 / 401,241
Maximum Zero Fuel Weight, MZFW	167,000 / 368,171	172,000 / 379,194	167,000 / 368,171	172,000 / 379,194

<b>Model A330-300 Airplane</b>	<b>A330-323/-343</b>	<b>A330-323/-342/-343</b>	<b>A330-343</b>	<b>A330-323</b>
Weight Variant	020 (Basic) kg / lb	022 (MOD 47785 iss2) kg / lb	024 (MOD 48350) kg / lb	025 (MOD 49651) kg / lb
Maximum Take-off Weight, MTOW	230,000 / 507,063	233,000 / 513,676	205,000 / 451,947	217,000 / 478,402
Maximum Landing Weight, MLW	185,000 / 407,855	187,000 / 412,264	185,000 / 407,855	179,000 / 394,627
Maximum Zero Fuel Weight, MZFW	173,000 / 381,399	175,000 / 385,808	173,000 / 381,399	169,000 / 372,581

<b>Model A330-300 Airplane</b>	<b>A330-302/-323/-343</b>			
Weight Variant	030 (MOD 204439) kg / lb	031 (MOD 204440) kg / lb	032 (MOD 204441) kg / lb	033 (MOD 204442) kg / lb
Maximum Take-off Weight, MTOW	199,000 / 438,719	199,000 / 438,719	190,000 / 418,878	190,000 / 418,878
Maximum Landing Weight, MLW	185,000 / 407,855	187,000 / 412,264	185,000 / 407,855	187,000 / 412,264
Maximum Zero Fuel Weight, MZFW	173,000 / 381,399	175,000 / 385,808	173,000 / 381,399	175,000 / 385,808

<b>Model A330-300 Airplane</b>	<b>A330-302/-323/-343</b>		
Weight Variant	034 (MOD 204443) kg / lb	035 (MOD 204444) kg / lb	039 (MOD 48350) kg / lb
Maximum Take-off Weight, MTOW	205,000 / 451,947	205,000 / 451,947	217,000 / 478,402
Maximum Landing Weight, MLW	185,000 / 407,855	187,000 / 412,264	187,000 / 412,264
Maximum Zero Fuel Weight, MZFW	173,000 / 381,399	175,000 / 385,808	175,000 / 385,808



Model A330-300 Airplane	A330-302/-303/-323/-343	A330-301	A330-302/-303/-323/-342/-343	A330-302
Weight Variant	050 (MOD 51805) kg / lb	051 (MOD 51806) kg / lb	052 (MOD 51807) kg / lb	053 (MOD 52924) kg / lb
Maximum Take-off Weight, MTOW	230,000 / 507,063	212,000 / 467,397	233,000 / 513,676	205,000 / 451,947
Maximum Landing Weight, MLW	185,000 / 407,855	187,000 / 412,264	187,000 / 412,264	185,000 / 407,855
Maximum Zero Fuel Weight, MZFW	173,000 / 381,399	175,000 / 385,808	175,000 / 385,808	173,000 / 381,399

Model A330-300 Airplane	A330-302/-303/-323/-343	A330-302/-303/-323/-343	A330-302/-303/-323/-342/-343	A330-323/-342/-343
Weight Variant	054 (MOD 201648 for Production) (MOD 202218 for Retrofit) kg / lb	055 (MOD 202462) kg / lb	056 (MOD 202878 Issue 1) kg/lb	057 (MOD 203716) kg/lb
Maximum Take-off Weight, MTOW	235,000 / 518,086	235,000 / 518,086	205,000/451,947	184,000/405,650
Maximum Landing Weight, MLW	187,000 / 412,264	187,000 / 412,264	187,000/412,264	174,000/383,604
Maximum Zero Fuel Weight, MZFW	173,000 / 381,399	173,000 / 381,399 to 175,000/385,808 Depending on TOW	175,000/385,808	164,000/361,558

Model A330-300 Airplane	A330-342/-343
Weight Variant	058 (MOD 204297) kg / lb
Maximum Take-off Weight, MTOW	215,000/473,993
Maximum Landing Weight, MLW	187,000/412,264
Maximum Zero Fuel Weight, MZFW	173,000/381,399

Model A330-300 Airplane	A330-302/-303/-323/-342/-343	A330-302/-303/-323/-342/-343	A330-302/-303/-323/-342/-343	A330-302/-303/-323/-342/-343
Weight Variant	080 (MOD 203897) kg / lb	081 (MOD 203898) kg/lb	082 (MOD 203900) kg/lb	083 (MOD 203899) kg / lb
Maximum Take-off Weight, MTOW	238,000 / 524,700	242,000/533,518	242,000/533,518	240,000 / 529,109
Maximum Landing Weight, MLW	187,000 / 412,264	187,000/412,264	187,000/412,264	187,000 / 412,264
Maximum Zero Fuel Weight, MZFW	175,000/385,808	171,000/376,990	171,000/376,990 to 175,000/385,808 Depending on TOW	173,000 / 381,399

### **Number of Seats**

The maximum number of passengers approved for emergency evacuation is:

- 375 passengers with a 3 pairs Type A and 1 pair Type 1 exit configuration, and
- 440 passengers with a 4 pairs Type A exit configuration.

**Maximum Baggage**

Cargo Compartment	Maximum Load (kg / lb)
Forward	22,861 / 50,408
Aft	18,507 / 40,808
Rear	3,468 / 7,647

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weight) see Weight and Balance Manual:

- A330-300 Airbus Document ref. 00G080A0006/C3S

**Fuel Capacity**

Without optional Center Fuel Tank

Model	Two Tank Airplane							
	Usable Fuel				Unusable Fuel (without MOD 204579)		Unusable Fuel (with MOD 204579)	
	A330-301/-321/-322/-341/-342				A330-302/-303/-323/-343		All Models	
Tank	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)
Wing	91,764 (73,411)	24,244 (161,871)	91,300 (73,040)	24,122 (161,053)	348 (279)	92 (615)	190 (152)	50 (335)
Trim Tank	6,121 (4,897)	1,617 (10,798)	6,230 (4,984)	1,646 (10,990)	6 (5)	1.6 (11)	6 (5)	1.6 (11)
Total	97,885 (78,308)	25,861 (172,669)	97,530 (78,024)	25,768 (172,043)	354 (284)	94 (626)	196 (157)	52 (346)

Optional Center Fuel Tank

	Three Tank Airplane					
	Usable Fuel		Unusable Fuel (without MOD 204579)		Unusable Fuel (with MOD 204579)	
Model	A330-302/-303/-323/-342/-343					
Tank	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)
Wing	91,764 (73,411)	24,244 (161,871)	348 (279)	92 (615)	190 (152)	50 (335)
Center	41,560 (33,248)	10,980 (73,311)	83 (67)	22 (148)	83 (67)	22 (148)
Trim Tank	6,121 (4,897)	1,617 (10,798)	6 (5)	1.6 (11)	6 (5)	1.6 (11)
Total	139,445 (111,556)	36,841 (245,980)	437 (351)	116 (774)	279 (224)	73.7 (494)

**Certification Basis (A330-300)**

- a. 14 CFR part 25 effective February 1, 1965, including the following:
  - Amendments 25-1 through 25-63, Amendments 25-65, 25-66, 25-77
  - § 25.791 at Amendment 25-72
- b. 14 CFR part 25 Amendment 25-64 with the following exceptions:
  - Cockpit seats will not meet § 25.562 Amendment 25-64 but will meet § 25.561
  - Compliance with § 25.785(a), (b), and (c) at Amendment 25-64 for front row seats in front of a bulkhead will be based on ensuring a 35 inch free head strike envelope.
- c. 14 CFR part 34, effective September 10, 1990.
- d. 14 CFR part 36 as amended by Amendments 36-1 through 36-20.
- e. Special conditions in accordance with § 21.16.
  1. Special conditions published in the Federal Register on October 19, 1993, (Docket No. NM-86, Special Conditions No. 25-ANM-77)

(1) Operation without Normal Electrical Power	(8) Limit Pilot Forces
(2) Electronic Flight Control System (EFCS) failures and Mode Annunciation	(9) Tail plane Tank Emergency Landing Loads
(3) Command Signal Integrity	(10) Limit Engine Torque
(4) Protection From Lightning and Unwanted Effects of High Intensity Radiated Fields (HIRF)	(11) Flight Characteristics
(5) Interaction of Systems and Structures	(12) Flight Envelope Protection
(6) Design Dive Speed	(13) Side Stick Controllers
(7) Design Maneuver Requirements	(14) Computerized Airplane Flight Manual (AFM) Performance Information
  2. Special Condition 25-281-SC published in the Federal Register on January 6, 2005 (Docket No. NM287): Lower Deck Mobile Crew Rest (LD-MCR) Compartment – Optional modification # 206615.
  3. Special Condition 25-395-SC published in the Federal Register November 03, 2009 (Docket No. NM-418): Seats With Inflatable Lap Belts.
  4. Special Condition 25-400 -SC published in the Federal Register January 4, 2010 (Docket No. NM-424): Seats with Non-Traditional, Large, Non-Metallic Panels.
  5. Special Condition 25-678-SC published in the Federal Register May 26, 2017 (Docket No. FAA-2017-0369): Non-Rechargeable Lithium Batteries  
This Special condition is effective to design changes applied for after May 26, 2017. See the applicability section of this special condition for more information on which design changes must meet it.
  6. Special Condition 25-739-SC published in the Federal Register on December 26, 2018 (Docket No. FAA-2018-1053): Electronic System Security Protection from Unauthorized External Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
  7. Special Condition 25-740-SC published in the Federal Register on December 26, 2018 (Docket No. FAA-2018-1054): Electronic System Security Protection from Unauthorized Internal Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
- f. The technical requirements are complemented by the following guidance material:

For precision approach and landing,

  1. AC 120-29
  2. AC 120-28C

and for the automatic flight control system

  1. AC 20-57A for automatic landing
  2. AC 25.1329-1A for cruise

g. Equivalent safety findings (ELOS) have been made in accordance with § 21.21(b)(1) for the following sections:

- (1) § 25.335(d) for design airspeeds\*
- (2) § 25.341 for gust loads\*
- (3) § 25.345 for high lift devices\*
- (4) § 25.349 for control surface loads\*
- (5) § 25.351(b) for unsymmetrical loads\*
- (6) § 25.371 for gyroscopic loads\*
- (7) § 25.373 for speed control devices\*
- (8) § 25.391 for control surface loads \*

\*These ELOS findings do not apply where the corresponding requirements of Amendment 25-141 are applied.

- (9) §§ 25.101(I); 25.105(c)(1); 25.109(a)(b)(c)(d)(e)(f); 25.113(a)(b)(c); 25.115(a); 25.735(f)(g)(h)(b) for rejected takeoff and landing performance
- (10) §§ 25.933(a)(1)(ii), 25.1309(b)(1) for flight critical thrust reverser
- (11) § 25.1203(d) for turbine overheat detection (RR Trent 700 powered A330-341, -342, -343 only)
- (12) § 25.1305(c)(6) Warning means for engine fuel filter contamination (RR Trent 700 powered A330-341, -342 and -343 only)
- (13) §§ 25.1305; 25.1501(b) for APU system flight deck instrumentation.
- (14) § 25.856(b), Improved Flammability standards for Thermal/acoustic insulation materials (documented in ELOS Memo TD0609IB-T-CI-5; Memo TD0609IB-T-CI-6 and Memo TD0609IB-T-CI-7).
- (15) § 25.785(d), Forward Facing Seat, over 18 degrees to aircraft centerline (documented in ELOS Memo TD0643IB-T-CI-9).
- (16) § 25.1457(d)(5) Cockpit Voice Recorder – Equivalent Level of Safety for 10 minute independent backup power requirement (documented in ELOS Memo TD0774IB-T-SA-1).
- (17) § 25.1443(c) Minimum mass flow of supplemental oxygen on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-1)
- (18) § 25.1441(c) Crew determination of quantity of oxygen in passenger oxygen system on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-2).
- (19) § 25.785 (d) Installation of seats that make angle of more than 18° with aircraft longitudinal axis (documented in TAD ELOS Memo AT10434IB-T-CS-1). Applicable only to A330-302 with Airbus modification # 204087 Issue 1.
- (20) §§ 25.811(g); 25.812(b)(1) Symbolic Exit Signs on Models A330 and A340 airplanes (documented in ELOS Memo TD00918IB-T-CS-1). For airplanes equipped with pictograms on exit marking signs and on exit location signs, the cabin crew in charge of the safety briefing should highlight these pictograms to the passengers prior to each takeoff and each landing
- (21) § 25.811(e)(4) Emergency Exit Marking on model A330 and A340 airplanes (documented in ELOS Memo AT10899IB-T-CS-1) for airplanes with Airbus modification # 206893.

h. Optional requirements elected:

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

i. Certification requirements for A330-302, A330-303, A330-323, A330-342, A330-343 with Airbus modifications ## 203897 (WV080); 203898 (WV081); 203900 (WV 082) and 203899 (WV 083):

- 14 CFR part 25 as listed here-above in § a. through § h. plus the following regulations at their amendment level as defined in the table below:

Section No.	Title	Amendment
25.3	Special provisions for ETOPS type design approvals	25-120
25.21(d)	Proof of compliance	25-72
25.29	Empty weight and corresponding center of gravity	25-72
25.107(e)(1)(iv)	Takeoff speeds	25-135
25.111	Takeoff path	25-72
25.119	Landing climb: All-engines-operating	25-84
25.121	Climb: One engine inoperative	25-84
25.145	Longitudinal control	25-84
25.253(a)(1), (a)(2), (a)(4), (a)(5)	High-speed characteristics	25-135

Section No.	Title	Amendment
25.519	Jacking and tie-down provisions	25-81
25.611(a)	Accessibility provisions	25-123
25.629	Aeroelastic stability requirements	25-77
25.1329(g)	Flight guidance system	25-119
25.1535	ETOPS approval	25-120
25.1581	Airplane flight manual: General	25-72
25.1583	Operating limitations	25-105
25.1585	Operating procedures	25-105
25.1587	Performance information	25-105
26.11	Electrical wiring interconnection systems (EWIS) maintenance program	26-0
26.21	Limit of validity	26-6
26.45(c)	Holders of type certificates – Alterations and repairs to alterations	26-4

- 14 CFR part 36 as amended by 36-1 through 36-29

j. Certification requirements for A330-302; A330-303; A330-323, A330-342 and A330-343 with Airbus modification # Project G3ActCT: “Fuel - Tanks - Activation of Center Tank on A330-300”:

- 14 CFR part 25 as listed here-above in § a. through § h. plus the following regulations at their amendment level and affected airplane systems and areas as defined in the table below:

Section No.	Title	Amendment	System/Area
25.1	Applicability	25-0	A330-300 airplane with center tank
25.3	Special provisions for ETOPS type design approvals	25-120	A330-300 airplane with center tank
25.101(c)(2)	Performance, General	25-38	A330-300 airplane with center tank
25.611	Accessibility provisions	25-123	A330-300 center tank, its structural elements and systems, center fuel tank inerting system, fuel system including pumps, valves, sensors, drain and ventilation system, and Fuel Quantity Indicating System (FQIS)/Fuel Level Sensing System (FLSS) EWIS installation
25.899	Electrical bonding and protection against static electricity	25-123	A330-300 airplane with center tank
25.901(c)	Installation	25-126	A330-300 center tank fuel system, including pumps, valves, sensors, EWIS installation, control, indication and information displays
25.903(d)(1)	Engines	25-100	A330-300 center tank fuel system, including pumps, valves, sensors, EWIS installation, drain and ventilation system, center fuel tank inerting system, controls and indications.
25.951	Fuel system: General	25-73	A330-300 center tank fuel system, including pumps, valves, EWIS installation, drain and ventilation system, center fuel tank inerting system, controls and indications..
25.963	Fuel tanks: general	25-69	A330-300 center tank structure
25.979	Pressure fueling system	25-72	A330-300 center tank refuel system
25.981	Fuel tank ignition prevention	25-125	A330-300 center tank and its fuel system, including pumps, valves, sensors, EWIS installation, drain and ventilation system, center fuel tank inerting system, controls and indication.
25.1141(a), (f)	Powerplant controls: general	25-115	Cockpit fuel controls for A330-300 center tank
25.1301(b)	Function and installation	25-123	A330-300 center tank fuel system FQIS/FLSS EWIS installation
25.1305(a)(2)	Powerplant instruments	25-115	Fuel quantity indication for A330-300 center tank
25.1309(a), (b), (c), (d), (e), (f)	Equipment, systems, and installations	25-123	A330-300 center tank and its fuel system, including pumps, valves, sensors, EWIS installation, drain and ventilation system, center fuel tank inerting system, controls and indications.

Section No.	Title	Amendment	System/Area
25.1351(d)	Electrical systems and equipment: general	25-72	A330-300 center tank fuel system, including pumps, valves, sensors, EWIS installation, drain and ventilation system, center fuel tank inerting system, controls and indications.
25.1535	ETOPS approval	25-120	A330-300 airplane with center tank
25.1581	Airplane flight manual: General	25-72	A330-300 airplane with center tank
25.1583	Operating limitations	25-105	A330-300 airplane with center tank
25.1585	Operating procedures	25-105	A330-300 airplane with center tank
25.1587	Performance information	25-105	A330-300 airplane with center tank
25.1703(a)(3), (a)(4), (d)	Function and installation: EWIS	25-123	A330-300 center tank FQIS/FLSS EWIS installation
25.1705(a), (b)(2)	Systems and functions: EWIS	25-123	A330-300 center tank fuel system FQIS/FLSS EWIS installation
25.1707(a), (b), (c), (l)	Systems separation: EWIS	25-123	A330-300 center tank fuel system FQIS/FLSS EWIS installation
25.1709(a), (b)	System safety: EWIS	25-123	A330-300 center tank fuel system FQIS/FLSS EWIS installation
25.1711(a), (b)	Component identification: EWIS	25-123	A330-300 center tank fuel system FQIS/FLSS EWIS installation
25.1719	Accessibility provisions: EWIS	25-123	A330-300 center tank fuel system FQIS/FLSS EWIS installation
25.1721(b)	Protection of EWIS	25-123	A330-300 center tank fuel system FQIS/FLSS EWIS installation

- Exemption No. 17129 dated October 26, 2016. This Exemption from 14 CFR 25.98 l(a)(3) is granted to Airbus as it relates to the Model A330-300 fuel trim tank structural lightning protection (Airbus modification # 204495 “Stabilizers – Horizontal Stabilizer – Define lateral box for weight reduction”).
- Exemption No. 17601, dated October 13, 2017. This exemption is granted for the requirements of 14 CFR part 25, appendix K, section K25.1.4(a)(2) as they relate to concurrent power of the fuel boost pumps in each main fuel tank and will allow to show that the airplanes are capable of continuously providing fuel pressure to all engines when only powered by an independent electrical power source other than the three power sources required in section K25.1.3(b) of appendix K, without maintaining simultaneous power to all individual fuel boost pumps. This exemption relates to Model A330 series airplanes ETOPS beyond 180 minutes approval.
- Equivalent safety findings have been made in accordance with § 21.21(b)(1) for the following sections: 14 CFR part 26.33 “Holders of type certificates: Fuel tank flammability” and 26.35 “Changes to type certificates affecting fuel tank flammability”, (documented in TAD ELOS Memo TD0547IB-T-P-1).
- 14 CFR part 36, effective December 1, 1969, as amended by Amendments 36-1 through 36-29.

The Direction Generale de l'Aviation Civile (DGAC) of France originally type certificated the Airbus Model A330-200 series airplanes under its type certificate number DGAC-F TC 184. The FAA validated this product under U.S. Type Certificate Number A46NM. Effective September 28, 2003, the European Union Aviation Safety Agency (EASA) began oversight of this product on behalf of DGAC.

#### Part 26 – Continued Airworthiness and Safety Improvements for Transport Category Airplanes:

Based on § 21.29(a) for new import TCs, or § 21.101(g) for changes to TCs, applicable provisions of part 26 are included in the certification basis. For any future part 26 amendments, the holder of this TC must demonstrate compliance with the applicable sections.

#### **FAA Required Modification List**

Compliance with the FAA Required Modification List for Airbus Model A330-300 Aircraft as included under the Import Requirements section of TCDS Revision 4, dated March 21, 2000 or later TCDS revision is necessary for an A330-300 aircraft to be found in a condition for safe operation. The FAA has accepted:

- Model A330-323 aircraft in the Airbus as-delivered configuration for MSN 524 and on as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL

G01M03003568 issue 2, dated June 24, 2003) that the RML modifications applicable to model A330-323 aircraft are either part of the FAA approved type design (ref. AI/EA-N 415.1630/99 Issue 1, dated July 20, 1999), required to be installed at aircraft delivery by DGAC AD, or required to be installed by Airbus on all Model A330-323 aircraft at time of delivery.

- Model A330-302 and -303 aircraft in the Airbus as-delivered configuration as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL G03D07012703 (for the -302) and EAL G03D07012712 (for the -303), each dated June 8, 2007) that the RML modifications applicable to model A330-302 and -303 aircraft are either part of the FAA approved type design (ref. EAL M05000400 and EAL M05000401; both at Issue 03 and dated May 2006), required to be installed at aircraft delivery by DGAC AD, or required to be installed by Airbus on all Model A330-302 and -303 aircraft at time of delivery.
- Model A330-343 aircraft in the Airbus as-delivered configuration as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL\_LR01M10004733, dated March 03, 2010) that the RML modifications applicable to model A330-343 aircraft are either part of the FAA approved type design (ref. AIAI/EA-N 415.2027/99 Issue 1, dated October 22, 1999), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-343 aircraft at time of delivery.

### **Equipment**

- The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.
- The following Airbus Documents defines the set of modifications, which comprise the FAA certificated type design. This document contains certain modifications determined necessary for FAA certification, including installation of ozone converters, fuel system improvements and thrust reverser modifications.
  - AI/EA-N 415.1181/96 Issue 3, dated July 16, 1997 for the A330-301
  - EAL M05000400 Issue 3, dated May 2006 for the A330-302
  - EAL M05000401 Issue 3, dated May 2006 for the A330-303
  - AI/EA-N 415.1184/96 Issue 3, dated June 25, 1998 for the A330-321
  - AI/EA-N 415.1183/96 Issue 3, dated July 25, 1998 for the A330-322
  - AI/EA-N 415.1630/99 Issue 1, dated July 20, 1999 for the A330-323
  - AI/EA-N 415.1187/96 Issue 2, dated December 11, 1998 for the A330-341
  - AI/EA-N 415.1182/99 Issue 2, dated December 11, 1998 for the A330-342
  - AI/EA-N 415.2027/99 Issue 1, dated October 22, 1999 for the A330-343
- Equipment approved for installation is listed in the Certification Standard Equipment List
  - 00G000A0101/C0S for the A330-301.
  - 00G000A0121/C0S for the A330-321 and -322.
  - 00G000A0123/C3S for the A330-323.
  - 00G000A0141/C0S for the A330-341 and -342.
  - 00G000A0143/C3S for the A330-343.
- Cabin furnishings, equipment and arrangement shall conform to the following specification:
  - 00F252K0005/C01 for cabin seats,
  - 00F252K0006/C01 for galley,
  - 00F252K0020/C01 for cabin attendant seats

### **Airplane Flight Manual**

Airplane operation must be in accordance with the EASA-Approved Airplane Flight Manual (AFM), US version, listed below, or later EASA approved revision applicable to the specific airplane model, modification status and serial number.

<b>Aircraft A330-300</b>	<b>Airbus Document Reference.</b>	<b>Revision No.</b>	<b>Date</b>
-301	AI/EV-O 33000	3	January 6, 1999
-321, -322	AI/ST-F 33000	2	January 6, 1999
-302, -303	STL 33000	4	November 21, 2006
-323	AI/ST-F 33000	4	May 18, 2001
-341, -342	AI/ST-F 33000	3	March 15, 2000
-343	AI/ST-F 33000	2	March 15, 2000

**Data Pertinent to All Model**

**See Section VI, Data Pertinent to All Model A330-200, A330-200 Freighter, A330-300, A330-800 and A330-900 Series airplanes.**  
for information on Fuel, Airspeed Limits, Center of Gravity Limits, Datum, Leveling Means, Minimum Crew, Maximum Operating Altitude, Control Surface Movements, Production Basis, Hydraulic Fluids, Auxiliary Power Unit (APU), Tires, Environmental requirements for noise, Manufacturer's Serial Numbers, Service Information, information on Import Requirements and General Notes



**IV. Type A330-800 Series Transport Category Airplanes****Airbus A330-841 - approved February 12th, 2020**

Model:	Definition of Reference Airplane by Airbus Documents:
A330-841	A330-841 Type Design, ref. 00G000A0841/C00 Issue 1, dated January 29, 2020, for type definition

**Engines**

Airplane Model	Engine Model:	Engine Type Certificate:
A330-841	Two RR Trent 7000 turbojet engines	FAA-Type Certificate E00076EN (EASA.E.036)

**Engine Limits**

Engine Limitations	A330-841 RR 7000 FAA Data Sheet E00076EN
Static Thrust at Sea Level <ul style="list-style-type: none"> <li>Take-off (5 mn)<sup>1</sup> (flat rated 30°C)</li> <li>Max continuous (flat rated 25°C)</li> </ul>	72,834 lbs 65,005 lbs
Maximum Engine Speed <ul style="list-style-type: none"> <li>N1 rpm (%)</li> <li>N2 rpm (%)</li> </ul>	2,683 (101.5%) 8,937 (103.5%)
Maximum Gas Temperature <ul style="list-style-type: none"> <li>Take-off (5mn)<sup>1</sup></li> <li>Maximum Continuous</li> <li>Starting<sup>2</sup></li> </ul>	1,652° F (900° C) 1,562° F (850° C) 1,292° F (700° C)
Maximum Oil Temperature (Supply Pump Outlet) °C <ul style="list-style-type: none"> <li>Continuous Operation</li> <li>Transient (15 mn max.)</li> <li>Minimum Oil Pressure (PSI)</li> </ul>	376° F (191° C) 385° F (196° C) 30.0 psid
Approved oils	Refer to the Engine Operating Instructions for A330/A340 for information on approved oil specifications for Trent 7000

Table references:

- (1) 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go around).  
(2) 4 consecutive cycles of 2 minutes each.

**Maximum Weight**

Model A330-800 Airplane	A330-841									
Weight Variant	800 (Basic) kg / lb	801 (205427) kg/lb	802 (205428) kg/lb	803 (205429) kg/lb	804 (205430) kg/lb	805 (209311) kg/lb	806 (209312) kg/lb	807 (209313) kg/lb	808 (209314) kg/lb	809 (209315) kg/lb
Maximum Take-off Weight, MTOW	242,000/ 533,518	242,000/ 533,518	238,000/ 524,700	234,000/ 515,881	230,000/ 507,063	220,000/ 485,016	215,000/ 473,993	210,000/ 462,970	205,000/ 451,947	200,000/ 440,923
Maximum Landing Weight, MLW	186,000/ 410,060	186,000/ 410,060	186,000/ 410,060	186,000/ 410,060	186,000/ 410,060	186,000/ 410,060	186,000/ 410,060	186,000 / 410,060	186,000/ 410,060	186,000 / 410,060
Maximum ZeroFuel Weight, MZFW	172,000 - 176,000*/ 379,195 - 388,014*	172,000/ 379,195	176,000/ 388,014							

(\*) Linear variation between those weights

**Number of Seats**

The maximum number of passengers approved for emergency evacuation is:

- 375 passengers with a 3 pairs of Type A and 1 pair Type 1 exits configuration, and
- 406 passengers with a 4 pairs of Type A exits configuration.

**Maximum Baggage**

Cargo Compartment	Maximum Load (kg / lb)
Forward	18,869 / 41,599
Aft	15,241 / 33,600
Rear	3,468 / 7,646

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weight) see weight and Balance Manual:

A330-800

Airbus Document 00G080A3WBM/C8S

**Fuel Capacity**

Tank	3 Tank Airplane			
	Usable Fuel		Unusable Fuel	
	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)
Wing	91,300 (73,040)	24,119 (161,026)	190 (152)	50 (335)
Center	41,560 (33,248)	10,980 (73,311)	83 (67)	22 (148)
Trim Tank	6,230 (4,984)	1,646 (10,988)	6 (5)	1.6 (11)
Total	139,090 (111,272)	36,744 (245,313)	279 (224)	74 (494)

**Certification Basis (A330-800)**

The FAA Certification basis for the Airbus Model A330-841 airplanes is defined as:

The original certification basis for the Airbus Model A330-200 series airplanes as defined in FAA TCDS A46NM for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25, for which Airbus elects to comply to bring the certification basis up to the same level as for the A330-300 series airplanes with Modification 203897, 203898, 203900 or 203899 (WV 080-083) and with Modification G3ActCT (Activation of center fuel tank) for components or areas not affected by the change and for secondary changes:

14 CFR part 25 as amended by Amendment 25-1 through 25-63:

25.335 (a), (b),(f); 25.1001(c), (d), (e), (f), (g), (h), (i);

14 CFR part 25 as amended by Amendment 25-1 through 25-123:

25.1705(a), (b)(5), (b)(9), (b)(12); 25.1721(c);

14 CFR part 25 as amended by Amendment 25-1 through 25-105:

25.1583

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

Paragraphs applicable to all A/C:

25.3, 25.21(a)(b)(c)(d)(e)(f), 25.23, 25.25, 25.27, 25.29, 25.101, 25.103(a)(c)(d), 25.105(b)(c)(d), 25.107 (a)(b)(c)(d)(e)(f)(g), 25.109, 25.111(a)(b)(d)(e), 25.113, 25.115, 25.117, 25.121(a), 25.123(a)(c), 25.145, 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, 25.253(a)(b), 25.255, 25.305(a)(b)(c)(f), 25.307(a), 25.321, 25.331, 25.333, 25.335(c)(d)(e), 25.337, 25.341, 25.343 (a)(b1)(b2)(b3), 25.345(a)(b)(d), 25.349, 25.351, 25.361 (a), 25.362, 25.365(a)(b)(d), 25.367, 25.371, 25.373, 25.427, 25.457, 25.471(a)(b), 25.473, 25.479, 25.481(a)(c), 25.483, 25.485, 25.489, 25.491, 25.493, 25.495, 25.499, 25.503, 25.507, 25.509, 25.511, 25.519, 25.623, 25.629, 25.683(a)(b)(c), 25.703, 25.809(g), 25.841, 25.843, 25.901(c), 25.963 (Center Tank Structure Only), 25.967, 25.969, 25.971, 25.975, 25.1316, 25.1317, 25.1329(g), 25.1337, 25.1355, 25.1501, 25.1503, 25.1505, 25.1507, 25.1511, 25.1513, 25.1515, 25.1516, 25.1517, 25.1519, 25.1529, 25.1531, 25.1533(a)(b), 25.1535, 25.1553, 25.1581, 25.1583, 25.1585, 25.1587.

Paragraphs applicable to the engine installation (New Engine, Pylon, pre-cooler, air inlet and nacelle, Structural adaptation of the wing at the wing/pylon interface, Electro Pneumatic Bleed Air System):

25.301(b)(c), 25.303, 25.363, 25.365(e)(1), 25.561(c), 25.581, 25.601, 25.603, 25.605, 25.607, 25.609, 25.611, 25.613, 25.619, 25.621, 25.625, 25.631, 25.721(b), 25.723(b), 25.733(b)(c)(d), 25.779(b), 25.851(b), 25.863, 25.865, 25.867, 25.869, 25.899, 25.901, 25.903, 25.933, 25.934, 25.939(a)(c), 25.943, 25.951(a)(b)(2)(c), 25.952, 25.954, 25.955(a), 25.959, 25.961(a), 25.963, 25.981 (except for fuel system wiring changes outside the pylon area and fuel tank structural fastener changes), 25.993(a)(b)(c)(d)(e), 25.994, 25.995, 25.997, 25.999(b), 25.1001(a)(b), 25.1011, 25.1013, 25.1015, 25.1017, 25.1019, 25.1021, 25.1023, 25.1025, 25.1041, 25.1043, 25.1045, 25.1091(a)(c)(d)(e), 25.1093(b), 25.1103, 25.1121, 25.1123, 25.1141, 25.1143, 25.1145, 25.1155, 25.1163, 25.1165(a)(b)(c)(e)(f)(g)(h), 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, 25.1351, 25.1353, 25.1357, 25.1360(a), 25.1363, 25.1419 (for powerplant installation only), 25.1431, 25.1435(a), 25.1438, 25.1461, 25.1521, 25.1527, 25.1549, 25.1551, 25.1557(b), 25.1701, 25.1703, 25.1705, 25.1707, 25.1709, 25.1711, 25.1713, 25.1715, 25.1717, 25.1719, 25.1721(a)(b), 25.1723, 25.1725, 25.1727, 25.1729, 25.1731, Appendix C.

Paragraphs applicable to aerodynamic changes (New winglet with wing span increase, Wing Aerodynamic clean up, Wing twist change, Wing engine interference, new navigation and strobe lights):

25.301(b)(c), 25.303, 25.363, 25.391 (for modified control surfaces only), 25.393, 25.415 (for modified control surfaces only), 25.581, 25.601, 25.603, 25.605, 25.607, 25.609, 25.611, 25.613, 25.619, 25.625, 25.631, 25.723(b), 25.863, 25.869, 25.899, 25.954, 25.959, 25.1001(a)(b), 25.1301, 25.1305, 25.1309, 25.1353, 25.1357, 25.1360(a), 25.1383(a), 25.1385(a)(b)(c)(d), 25.1387, 25.1389, 25.1391, 25.1393, 25.1395, 25.1397, 25.1401 (a)(b)(c)(d)(e)(f), 25.1403, 25.1431, 25.1438, 25.1525

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 exception justifications in accordance with 14 CFR 21.101:

- 25.103(b), 25.105(a), 25.111(c), 25.119, 25.121(b)(c)(d), 25.123(b), 25.125, 25.143, 25.207, 25.237, and 25.1419, Amendments 25-1 through 25-120, for "Flight in icing conditions." FAA acceptance of this exception is based on compliance with EASA CRI B-07 Flight in Icing Conditions.
- 25.571, Amendments 25-1 through 25-86, for "Damage tolerance and fatigue evaluation of structure." FAA acceptance of this exception is based on compliance with 14 CFR part 26.
- 25.981, Amendments 25-1 through 25-11, for the fuel system wiring changes outside the pylon area and the fuel tank structural fastener changes. FAA acceptance of this exception is based on Fuel Quantity Indicating System (FQIS) and Fuel Level Sensor System (FLSS) wiring isolation with protective sleeving and closely spaced ties in the S-routes with labels identifying the fuel system wiring and Airbus compliance with FAA Policy Statement ANM-112-08-002 "Policy on Issuance of Special Conditions and Exemptions Related to Lightning Protection of Fuel Tank Structure," dated May 26, 2009, for the fuel tank structural fastener changes.
- Appendix H to part 25, Amendments 25-1 through 25-54, for Instructions for Continued Airworthiness. FAA acceptance of this exception is based on compliance with 14 CFR part 26.

Plus the following optional sections of 14 CFR part 25 for which Airbus elects to comply as indicated below:

25.1535, Amendments 25-1 through 25-141

Plus the following optional requirements for which Airbus elects to comply to 14 CFR part 25 Amendment 25-1 through 25-143:

25.975(a)(7) for compliance with the operational rules §121.1119 and §129.119 related to fuel tank vent explosion protection.

#### Special Conditions

The full list of Special Conditions applicable to the A330-841 is defined below:

1. Special Conditions No. 25-ANM-77 published in the Federal Register on October 19, 1993, (Docket No. NM 86, Special Conditions No. 25-ANM-77):
  - (1) Operation without Normal Electrical Power
  - (2) Electronic Flight Control System (EFCS) failures and Mode Annunciation
  - (3) Command Signal Integrity
  - (4) Protection From Lightning and Unwanted Effects of High Intensity Radiated Fields (HIRF)
  - (6) Design Dive Speed
  - (7) Design Maneuver Requirements
  - (8) Limit Pilot Forces
  - (9) Tail plane Tank Emergency Landing Loads -
  - (10) Limit Engine Torque
  - (11) Flight Characteristics
  - (12) Flight Envelope Protection
  - (13) Side Stick Controllers

2. Special Condition 25-281-SC published in the Federal Register on January 6, 2005 (Docket No. NM287): Lower Deck Mobile Crew Rest (LD-MCR) Compartment – Optional modification # 206615.
3. Special Condition 25-395-SC published in the Federal Register November 03, 2009 (Docket No. NM-418): Seats With Inflatable Lap Belts.
4. Special Condition 25-400 -SC published in the Federal Register January 4, 2010 (Docket No. NM-424): Seats with Non-Traditional, Large, Non-Metallic Panels.
5. Special Condition 25-678-SC published in the Federal Register May 26, 2017 (Docket No. FAA-2017-0369): Non-Rechargeable Lithium Batteries  
This Special condition is effective to design changes applied for after May 26, 2017. See the applicability section of this special condition for more information on which design changes must meet it.
6. Special Condition 25-696-SC published in Federal Register on August 4, 2017 (Docket No. FAA–2017–0356): Interaction of Systems and Structure.
7. Special Condition 25-708-SC published in Federal Register on January 16, 2018 (Docket No. FAA–2017–0483): Electronic Flight Control System Lateral-Directional and Longitudinal Stability and Low Energy Awareness.
8. Special Condition 25-709-SC published in Federal Register on January 4, 2018 (Docket No. FAA–2017–0482): Use of High Incidence Protection and Alpha Floor Systems.
9. Special Condition 25-739-SC published in the Federal Register on December 26, 2018 (Docket No. FAA–2018–1053): Electronic System Security Protection from Unauthorized External Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
10. Special Condition 25-740-SC published in the Federal Register on December 26, 2018 (Docket No. FAA–2018–1054): Electronic System Security Protection from Unauthorized Internal Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
11. Special Condition 25-747-SC published in the Federal Register on May 29, 2019 (Docket No. FAA–2019–0235): Seats with Inertia Locking Devices (Airbus modification # 207317).

#### Equivalent Safety Findings (ELOS)

The full list of ELOS applicable to the A330-841 is defined below:

- (1) § 25.335(d) for design airspeeds\*
- (2) § 25.341 for gust loads\*
- (3) § 25.345 for high lift devices\*
- (4) § 25.349 for control surface loads\*
- (5) § 25.351(b) for unsymmetrical loads\*
- (6) § 25.371 for gyroscopic loads\*
- (7) § 25.373 for speed control devices\*
- (8) § 25.391 for control surface loads \*

\*These ELOS findings do not apply where the corresponding requirements of Amendment 25-141 are applied.

- (9) §§ 25.101(I); 25.105(c)(1); 25.109(a)(b)(c)(d)(e)(f); 25.113(a)(b)(c); 25.115(a); 25.735(f)(g)(h)(b) for rejected takeoff and landing performance
- (10) §§ 25.933(a)(1)(ii), 25.1309(b)(1) for flight critical thrust reverser
- (11) §§ 25.1305; 25.1501(b) for APU system flight deck instrumentation
- (12) § 25.856(b), Improved Flammability standards for Thermal/acoustic insulation materials (documented in ELOS Memo TD0609IB-T-CI-5; Memo TD0609IB-T-CI-6 and Memo TD0609IB-T-CI-7).
- (13) § 25.785(d), Forward Facing Seat, over 18 degrees to aircraft centerline (documented in ELOS Memo TD0643IB-T-CI-9).
- (14) § 25.1457(d)(5) Cockpit Voice Recorder – Equivalent Level of Safety for 10 minute independent backup power requirement (documented in ELOS Memo TD0774IB-T-SA-1).
- (15) §§ 26.33, 26.35 Fuel Center Tank Flammability Reduction System (documented in ELOS Memo TD0547IB-T-P-1)
- (16) § 25.981(a)(3) Amendment. 25-102 Installation of Fuel Pump Ground Fault Interrupter (GFI) Devices (documented in ELOS Memo TD0764IB-T-P-1)

- (17) § 25.1443(c) Minimum mass flow of supplemental oxygen on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-1)
- (18) § 25.1441(c) Crew determination of quantity of oxygen in passenger oxygen system on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-2)
- (19) §§ 25.811(g); 25.812(b)(1) Symbolic Exit Signs on Models A330 and A340 airplanes (documented in ELOS Memo TD00918IB-T-CS-1). For airplanes equipped with pictograms on exit marking signs and on exit location signs, the cabin crew in charge of the safety briefing should highlight these pictograms to the passengers prior to each takeoff and each landing.
- (20) § 25.811(e)(4) Emergency Exit Marking on model A330 and A340 airplanes (documented in ELOS Memo AT10899IB-T-CS-1) for airplanes with Airbus modification # 206893.
- (21) § 25.779(b)(1) Throttle Motion During Reduced (Flexible) Takeoff Thrust Operations and/or Go-Around documented in ELOS Memo TC0544IB-T-P-7
- (22) § 25.1193(e)(3) Cowling and Nacelle Skin Fireproof Regions documented in ELOS Memo TC0544IB-T-P-31
- (23) § 25.1549(a) Oil Temperature Indication documented in ELOS Memo AT10413IB-T-P-6
- (24) § 25.1203(d) Rolls Royce Engine Turbine Overheat Detection (documented in ELOS Memo AT10413IB-T-P-7)
- (25) § 25.934 Thrust Reverser Testing documented in ELOS Memo AT10413IB-T-P-9
- (26) § 25.1195(c) Fire Extinguishing Agent concentration documented in ELOS Memo AT10413IB-T-P-11
- (27) §§ 25.1549(a), (b) and (c) Digital Only Display of Turbine Engine Intermediate (N2) and High (N3) Rotor Speeds documented in ELOS Memo AT10413IB-T-P-12
- (28) §§ 25.1182(a) and 25.1195 through 25.1203 Nacelle Areas Behind Firewalls documented in ELOS Memo AT10413IB-T-P-13
- (29) § 25.1191(b)(1) Firewall Caps and Seals Fire Withstanding Capability documented in ELOS Memo AT10413IB-T-P-15
- (30) §§ 25.1301 and 25.1309 Function and Installation, and Equipment, Systems, and Installation Requirements: Use of ARAC Recommendations documented in ELOS Memo AT10413IB-T-SA-1
- (31) § 25.1383(b) Single Landing Light Switch documented in ELOS Memo AT10413IB-T-SE-1
- (32) § K25.2.2(g) of Part 25 Appendix K, Early Extended Operations (ETOPS) Airplane Demonstration Tests documented in ELOS Memo AT11032IB-T-EE-5

#### Exemptions

The full list of Exemptions applicable to the A330-841 is defined below:

Exemption No. 17129 dated October 26, 2016. This Exemption from 14 CFR 25.98 I(a)(3) is granted to Airbus as it relates to the Model A330-300 fuel trim tank structural lightning protection (Airbus modification # 204495 “Stabilizers – Horizontal Stabilizer – Define lateral box for weight reduction”).

Exemption No. 17581, dated September 29, 2017. This partial grant of exemption from Section §§ 25.841(a)(2)(i) and (ii), and (a)(3), Amendment 25-87, will permit cabin pressure altitude to exceed 40,000 feet for 1 minute, but not to exceed 41,500 feet for any duration, and permit cabin pressure altitude to exceed 25,000 feet for more than 2 minutes, but not more than 3 minutes, after decompression.

Exemption No. 17601, dated October 13, 2017. This exemption is granted for the requirements of 14 CFR part 25, appendix K, section K25.1.4(a)(2) as they relate to concurrent power of the fuel boost pumps in each main fuel tank and will allow to show that the airplanes are capable of continuously providing fuel pressure to all engines when only powered by an independent electrical power source other than the three power sources required in section K25.1.3(b) of appendix K, without maintaining simultaneous power to all individual fuel boost pumps. This exemption relates to Model A330 series airplanes ETOPS beyond 180 minutes approval. Airbus will complete this under a post TC type design change.

Exemption No. 18136, dated February 28, 2019. This exemption is granted for the requirements of 14 CFR 25.813(e), amendment 25-116, and 14 CFR 121.310(f)(5) and (6) to the extent necessary to allow the installation of doors on mini-suites.

#### Noise standards

14 CFR part 36. Amendments 36-1 through Amendment 36-31, for Stage 5.

#### Fuel venting and exhaust emissions standards

14 CFR part 34, Amendments 34-1 through 34-5A.

#### Part 26

14 CFR part 26. Amendments 26-1 through 26-6.

**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. At this time, the FAA identified the following subject for further review and evaluation:

a) **In-Flight Engine Restart**

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.

**Equipment**

- The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.
- Cabin furnishings, equipment and arrangement shall conform to the following specification:
  - 00F252K0005/C01 for cabin seats,
  - 00F252K0006/C01 for galley,
  - 00F252K0020/C01 for cabin attendant seat

**Airplane Flight Manual**

Airplane operation must be in accordance with the EASA Approved Airplane Flight Manual (AFM), US version, listed below, or later EASA approved revision applicable to the specific airplane model, modification status and serial number.

<b>Model A330-800</b>	<b>Airbus Document Reference</b>	<b>Revision No.</b>	<b>Date</b>
-841	STL 33000	1	February 12, 2020

**Data Pertinent to All Model****See Section VI, Data Pertinent to All Model A330-200, A330-200 Freighter, A330-300, A330-800 and A330-900 Series airplanes.**

For information on Fuel, Airspeed Limits, Center of Gravity Limits, Datum, Leveling Means, Minimum Crew, Maximum Operating Altitude, Control Surface Movements, Production Basis, Hydraulic Fluids, Auxiliary Power Unit (APU), Tires, Environmental requirements for noise, Manufacturer's Serial Numbers, Service Information, information on Import Requirements and General Notes

**V. Type A330-900 Series Transport Category Airplanes****Airbus A330-941 - approved December 21, 2018**

Model:	Definition of Reference Airplane by Airbus Documents:
A330-941	A330-941 Type Design, ref. 00G000A0941/C00 Issue 1, dated September 8, 2018, for type definition

**Engines**

Airplane Model	Engine Model:	Engine Type Certificate:
A330-941	Two RR Trent 7000 turbojet engines	FAA-Type Certificate E00076EN (EASA.E.036)

**Engine Limits**

Engine Limitations	A330-941 RR 7000 FAA Data Sheet E00076EN
Static Thrust at Sea Level <ul style="list-style-type: none"> <li>Take-off (5 mn)<sup>1</sup> (flat rated 30°C)</li> <li>Max continuous (flat rated 25°C)</li> </ul>	72,834 lbs 65,005 lbs
Maximum Engine Speed <ul style="list-style-type: none"> <li>N1 rpm (%)</li> <li>N2 rpm (%)</li> </ul>	2,683 (101.5%) 8,937 (103.5%)
Maximum Gas Temperature <ul style="list-style-type: none"> <li>Take-off (5mn)<sup>1</sup></li> <li>Maximum Continuous</li> <li>Starting<sup>2</sup></li> </ul>	1,652° F (900° C) 1,562° F (850° C) 1,292° F (700° C)
Maximum Oil Temperature (Supply Pump Outlet) °C <ul style="list-style-type: none"> <li>Continuous Operation</li> <li>Transient (15 mn max.)</li> <li>Minimum Oil Pressure (PSI)</li> </ul>	376° F (191° C) 385° F (196° C) 30.0 psid
Approved oils	Refer to the Engine Operating Instructions for A330/A340 for information on approved oil specifications for Trent 7000

Table references:

(1) 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go around).

(2) 4 consecutive cycles of 2 minutes each.

**Maximum Weight**

Model A330-900 Airplane	A330-941								
Weight Variant	900 (Basic) kg / lb	901 (205432) kg / lb	902 (205433) kg / lb	903 (205434) kg / lb	904 (205435) kg / lb	905 (209307) kg / lb	906 (209308) kg / lb	907 (209309) kg / lb	908 (209310) kg / lb
Maximum Take-off Weight, MTOW	242,000 / 533,518	242,000 / 533,518	238,000 / 524,700	234,000 / 515,881	230,000 / 507,063	220,000 / 485,016	215,000 / 473,993	210,000 / 462,970	205,000 / 451,947
Maximum Landing Weight, MLW	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083
Maximum Zero Fuel Weight, MZFW	177,000- 181,000* / 390,218- 399,036*	177,000 / 390,218	181,000 / 399,036						

Model A330-900 Airplane	A330-941		
Weight Variant	910 (208554) kg / lb	911 (208555) kg / lb	912 (208556) kg / lb
Maximum Take-off Weight, MTOW	245,000 / 540,132	245,000 / 540,132	241,000 / 531,314
Maximum Landing Weight, MLW	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083
Maximum Zero Fuel Weight, MZFW	177,000- 181,000* / 390,218-399,036*	177,000 / 390,218	181,000 / 399,036

Model A330-900 Airplane	A330-941		
	920 (207873) kg / lb	921 (208006) kg / lb	922 (208007) kg / lb
Maximum Take-off Weight, MTOW	251,000 / 553360	251,000 / 553360	247,000 / 544542
Maximum Landing Weight, MLW	191,000 / 421,083	191,000 / 421,083	191,000 / 421,083
Maximum Zero Fuel Weight, MZFW	177,000-181,000* / 390,218-399,036*	177,000 / 390,218	181,000 / 399,036

(\*) Linear variation between those weights

### **Number of Seats**

The maximum number of passengers approved for emergency evacuation is:

- 375 passengers with a 3 pairs of Type A and 1 pair Type 1 exits configuration, and
- 440 passengers with a 4 pairs of Type A exits configuration.

### **Maximum Baggage**

Cargo Compartment	Maximum Load (kg / lb)
Forward	22,861 / 50,400
Aft	18,507 / 40,801
Rear	3,468 / 7,646

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weight) see weight and Balance Manual:

A330-900

Airbus Document 00G080A3WBM/C9S

### **Fuel Capacity**

Tank	3 Tank Airplane			
	Usable Fuel		Unusable Fuel	
	liters (kg)	gallons (lb)	liters (kg)	gallons (lb)
Wing	91,300 (73,040)	24,119 (161,026)	190 (152)	50 (335)
Center	41,560 (33,248)	10,980 (73,311)	83 (67)	22 (148)
Trim Tank	6,230 (4,984)	1,646 (10,988)	6 (5)	1.6 (11)
Total	139,090 (111,272)	36,744 (245,313)	279 (224)	73.7 (494)

### **Certification Basis (A330-900)**

The FAA Certification basis for the Airbus Model A330-941 airplanes is defined as:

The certification basis for the baseline Airbus Model A330-300 series airplanes with Modification 203897, 203898, 203900 or 203899 (WV 080-083) and with Modification G3ActCT (Activation of center fuel tank ) as defined in Section III of this FAA TCDS A46NM for components or areas not affected by the change.

Plus the following sections of 14 CFR part 25, Amendments 25-1 through 25-72, for which Airbus elects to comply to bring the baseline certification basis up to the same level as the A330-200 for components or areas not affected by the change and for secondary changes:

25.307(b)(c)(d), 25.343(b)(2) and (b)(3), 25.361(b)(c), 25.397, 25.459, 25.615 (Vertical Stabilizer Only), 25.693, 25.723(a)(c), 25.729, 25.731, 25.733(a)(e), 25.735, 25.772, 25.779, 25.783, 25.791, 25.1093, 25.1381, 25.1385, 25.1415, 25.1522, 25.1543

Plus the following sections of 14 CFR part 25, Amendments 25-1 through 25-138 (i.e., the amendment in effect on the date of application) applied to the components and areas affected by the change:



Paragraphs applicable to all A/C:

25.3, 25.21(a)(b)(c)(d)(e)(f), 25.23, 25.25, 25.27, 25.29, 25.101, 25.103(a)(c)(d), 25.105(b)(c)(d), 25.107 (a)(b)(c)(d)(e)(f)(g), 25.109, 25.111(a)(b)(d)(e), 25.113, 25.115, 25.117, 25.121(a), 25.123(a)(c), 25.145, 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, 25.253(a)(b), 25.255, 25.305(a)(b)(c)(f), 25.321, 25.333, 25.335(c)(d)(e), 25.337, 25.345(a)(b)(d), 25.349, 25.351, 25.365(a)(b)(d), 25.367, 25.427, 25.457, 25.471(a)(b), 25.473, 25.479, 25.481(a)(c), 25.483, 25.485, 25.489, 25.491, 25.493, 25.495, 25.499, 25.503, 25.507, 25.509, 25.511, 25.519, 25.623, 25.629, 25.683(a)(c), 25.703, 25.809(g), 25.841, 25.843, 25.901(c), 25.963 (Center Tank Structure Only), 25.967, 25.969, 25.971, 25.975, 25.1316, 25.1317, 25.1329(g), 25.1337, 25.1355, 25.1501, 25.1503, 25.1505, 25.1507, 25.1511, 25.1513, 25.1515, 25.1516, 25.1519, 25.1529, 25.1531, 25.1533, 25.1535, 25.1553, 25.1581, 25.1583, 25.1585, 25.1587.

Paragraphs applicable to the engine installation (New Engine, Pylon, pre-cooler, air inlet and nacelle, Structural adaptation of the wing at the wing/pylon interface, Electro Pneumatic Bleed Air System):

25.301(b)(c), 25.303, 25.363, 25.365(e)(1), 25.561(c), 25.581, 25.601, 25.603, 25.605, 25.607, 25.609, 25.611, 25.613, 25.619, 25.621, 25.625, 25.631, 25.721(b), 25.733(b)(c)(d), 25.779(b), 25.809(f)(1)(iii)(iv), 25.851(b), 25.863, 25.865, 25.867, 25.869, 25.899, 25.901, 25.903, 25.933(a), 25.934, 25.939(a)(c), 25.943, 25.951(a)(b)(2)(c), 25.952, 25.954, 25.955(a), 25.959, 25.961(a), 25.963, 25.981 (except for fuel system wiring changes outside the pylon area and fuel tank structural fastener changes), 25.993(a)(b)(c)(d)(e), 25.994, 25.995, 25.997, 25.999(b), 25.1001(a)(b), 25.1011, 25.1013, 25.1015, 25.1017, 25.1019, 25.1021, 25.1023, 25.1025, 25.1041, 25.1043, 25.1045, 25.1091(a)(c)(d)(e), 25.1093(b), 25.1103, 25.1121, 25.1123, 25.1141, 25.1143, 25.1145, 25.1155, 25.1163, 25.1165(a)(b)(c)(e)(f)(g)(h), 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, 25.1351, 25.1353, 25.1357, 25.1360(a), 25.1363, 25.1419 (for powerplant installation only), 25.1431, 25.1435(a), 25.1438, 25.1461, 25.1521, 25.1527, 25.1549, 25.1551, 25.1557(b), 25.1701, 25.1703, 25.1705, 25.1707, 25.1709, 25.1711, 25.1713, 25.1715, 25.1717, 25.1719, 25.1721(a)(b), 25.1723, 25.1725, 25.1727, 25.1729, 25.1731.

Paragraphs applicable to aerodynamic changes (New winglet with wing span increase, Wing Aerodynamic clean up, Wing twist change, Wing engine interference, new navigation and strobe lights):

25.301(b)(c), 25.303, 25.363, 25.393, 25.581, 25.601, 25.603, 25.605, 25.607, 25.609, 25.611, 25.613, 25.619, 25.625, 25.631, 25.723(b), 25.863, 25.869, 25.899, 25.954, 25.959, 25.1001(a)(b), 25.1301, 25.1305, 25.1309, 25.1353, 25.1357, 25.1360(a), 25.1383(a), 25.1385(a)(b)(c)(d), 25.1387, 25.1389, 25.1391, 25.1393, 25.1395, 25.1397, 25.1401 (a)(b)(c)(d)(e)(f), 25.1403, 25.1431, 25.1438, 25.1525.

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 exception justifications in accordance with 14 CFR 21.101:

- 25.103(b), 25.105(a), 25.111(c), 25.119, 25.121(b)(c)(d), 25.123(b), 25.125, 25.143, 25.207, 25.237, and 25.1419, Amendments 25-1 through 25-120, for "Flight in icing conditions." FAA acceptance of this exception is based on compliance with EASA CRI B-07 Flight in Icing Conditions.
- 25.571, Amendments 25-1 through 25-86, for "Damage tolerance and fatigue evaluation of structure." FAA acceptance of this exception is based on compliance with 14 CFR part 26.
- 25.981, Amendments 25-1 through 25-11, for the fuel system wiring changes outside the pylon area and the fuel tank structural fastener changes. FAA acceptance of this exception is based on Fuel Quantity Indicating System (FQIS) and Fuel Level Sensor System (FLSS) wiring isolation with protective sleeving and closely spaced ties in the S-routes with labels identifying the fuel system wiring and Airbus compliance with FAA Policy Statement ANM-112-08-002 "Policy on Issuance of Special Conditions and Exemptions Related to Lightning Protection of Fuel Tank Structure," dated May 26, 2009, for the fuel tank structural fastener changes.
- Appendix H to part 25, Amendments 25-1 through 25-54, for Instructions for Continued Airworthiness. FAA acceptance of this exception is based on compliance with 14 CFR part 26.

Plus the following sections of 14 CFR part 25, Amendments 25-1 through 25-139, for which Airbus elects to comply for harmonization reasons:

25.307(a) and 25.683(b)

Plus the following sections of 14 CFR part 25, Amendments 25-1 through 25-141, for which Airbus elects to comply for harmonization reasons:

25.331, 25.341, 25.343(a) and (b)(1), 25.361(a), 25.362, 25.371, 25.373, 25.391 (for modified control surfaces only), 25.415 (for modified control surfaces only), and 25.1517

Plus the following optional sections of 14 CFR part 25 for which Airbus elects to comply as indicated below:

25.1535, Amendments 25-1 through 25-138

Special Conditions

The full list of Special Conditions applicable to the A330-941 is defined below:

1. Special Conditions No. 25-ANM-77 published in the Federal Register on October 19, 1993, (Docket No. NM 86, Special Conditions No. 25-ANM-77):
 

(1) Operation without Normal Electrical Power	(8) Limit Pilot Forces
(2) Electronic Flight Control System (EFCS) failures and Mode Annunciation	(9) Tail plane Tank Emergency Landing Loads -
(3) Command Signal Integrity	(10) Limit Engine Torque
(4) Protection From Lightning and Unwanted Effects of High Intensity Radiated Fields (HIRF)	(11) Flight Characteristics
(6) Design Dive Speed	(12) Flight Envelope Protection
(7) Design Maneuver Requirements	(13) Side Stick Controllers
2. Special Condition 25-281-SC published in the Federal Register on January 6, 2005 (Docket No. NM287): Lower Deck Mobile Crew Rest (LD-MCR) Compartment – Optional modification # 206615.
3. Special Condition 25-395-SC published in the Federal Register November 03, 2009 (Docket No. NM-418): Seats With Inflatable Lap Belts.
4. Special Condition 25-400 -SC published in the Federal Register January 4, 2010 (Docket No. NM-424): Seats with Non-Traditional, Large, Non-Metallic Panels.
5. Special Condition 25-678-SC published in the Federal Register May 26, 2017 (Docket No. FAA-2017-0369): Non-Rechargeable Lithium Batteries  
This Special condition is effective to design changes applied for after May 26, 2017. See the applicability section of this special condition for more information on which design changes must meet it.
6. Special Condition 25-696-SC published in Federal Register on August 4, 2017 (Docket No. FAA–2017–0356): Interaction of Systems and Structure.
7. Special Condition 25-708-SC published in Federal Register on January 16, 2018 (Docket No. FAA–2017–0483): Electronic Flight Control System Lateral-Directional and Longitudinal Stability and Low Energy Awareness.
8. Special Condition 25-709-SC published in Federal Register on January 4, 2018 (Docket No. FAA–2017–0482): Use of High Incidence Protection and Alpha Floor Systems.
9. Special Condition 25-739-SC published in the Federal Register on December 26, 2018 (Docket No. FAA–2018–1053): Electronic System Security Protection from Unauthorized External Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
10. Special Condition 25-740-SC published in the Federal Register on December 26, 2018 (Docket No. FAA–2018–1054): Electronic System Security Protection from Unauthorized Internal Access.  
This Special Condition apply to installation and activation of electronic network system architecture or Flight Operations and Maintenance Exchanger (FOMAX) equipment (Airbus modification # 207456).
11. Special Condition 25-747-SC published in the Federal Register on May 29, 2019 (Docket No. FAA–2019–0235): Seats with Inertia Locking Devices (Airbus modification # 207317).

Equivalent Safety Findings (ELOS)

The full list of ELOS applicable to the A330-941 is defined below:

*(1) § 25.335(d) for design airspeeds
*(2) § 25.341 for gust loads
*(3) § 25.345 for high lift devices
*(4) § 25.349 for control surface loads
*(5) § 25.351(b) for unsymmetrical loads
*(6) § 25.371 for gyroscopic loads
*(7) § 25.373 for speed control devices

*(8) § 25.391 for control surface loads
* These ELOS findings do not apply where the corresponding requirements of Amendment 25-141 are applied.
(9) §§ 25.101(I); 25.105(c)(1); 25.109(a)(b)(c)(d)(e)(f); 25.113(a)(b)(c); 25.115(a); 25.735(f)(g)(h)(b) for rejected takeoff and landing performance
(10) §§ 25.1305; 25.1501(b) for APU system flight deck instrumentation.
(11) § 25.856(b), Improved Flammability standards for Thermal/acoustic insulation materials (documented in ELOS Memo TD0609IB-T-CI-5; Memo TD0609IB-T-CI-6 and Memo TD0609IB-T-CI-7).
(12) § 25.785(d), Forward Facing Seat, over 18 degrees to aircraft centerline (documented in ELOS Memo TD0643IB-T-CI-9).
(13) § 25.1457(d)(5) Cockpit Voice Recorder – Equivalent Level of Safety for 10 minute independent backup power requirement (documented in ELOS Memo TD0774IB-T-SA-1).
(14) § 25.1443(c) Minimum mass flow of supplemental oxygen on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-1)
(15) § 25.1441(c) Crew determination of quantity of oxygen in passenger oxygen system on model A330 and A340 airplanes (documented in ELOS Memo AT10356IB-T-S-2).
(16) §§ 25.811(g); 25.812(b)(1) Symbolic Exit Signs on Models A330 and A340 airplanes (documented in ELOS Memo TD00918IB-T-CS-1). For airplanes equipped with pictograms on exit marking signs and on exit location signs, the cabin crew in charge of the safety briefing should highlight these pictograms to the passengers prior to each takeoff and each landing
(17) § 25.811(e)(4) Emergency Exit Marking on model A330 and A340 airplanes (documented in ELOS Memo AT10899IB-T-CS-1) for airplanes with Airbus modification # 206893.
(18) §§ 26.33 and 26.35 Fuel Tank Flammability Reduction Airplane Descent Profile documented in ELOS Memo TD0547IB-T-P-1;
(19) § 25.779(b)(1) Throttle Motion During Reduced (Flexible) Takeoff Thrust Operations and/or Go-Around documented in ELOS Memo TC0544IB-T-P-7
(20) § 25.933(a)(1)(ii) Flight Critical Thrust Reverser documented in ELOS Memo TC0544IB-T-P-10
(21) § 25.1193(e)(3) Cowling and Nacelle Skin Fireproof Regions documented in ELOS Memo TC0544IB-T-P-31
(22) § 25.1549(a) Oil Temperature Indication documented in ELOS Memo AT10413IB-T-P-6
(23) § 25.934 Thrust Reverser Testing documented in ELOS Memo AT10413IB-T-P-9
(24) § 25.1195(c) Fire Extinguishing Agent concentration documented in ELOS Memo AT10413IB-T-P-11
(25) §§ 25.1549(a), (b) and (c) Digital Only Display of Turbine Engine Intermediate (N2) and High(N3) Rotor Speeds documented in ELOS Memo AT10413B-T-P-12
(26) § 25.1203(d) Rolls Royce Engine Turbine Overheat Detection (documented in ELOS Memo AT10413IB-T-P-7)
(27) §§ 25.1182(a) and 25.1195 through 25.1203 Nacelle Areas Behind Firewalls documented in ELOS Memo AT10413IB-T-P-13
(28) § 25.1191(b)(1) Firewall Caps and Seals Fire Withstanding Capability documented in ELOS Memo AT10413IB-T-P-15
(29) §§ 25.1301 and 25.1309 Function and Installation, and Equipment, Systems, and Installation Requirements: Use of ARAC Recommendations documented in ELOS Memo AT10413IB-T-SA-1
(30) § 25.1383(b) Single Landing Light Switch documented in ELOS Memo AT10413IB-T-SE-1
(31) § K25.2.2(g) of Part 25 Appendix K, Early Extended Operations (ETOPS) Airplane Demonstration Tests documented in ELOS Memo AT11032IB-T-EE-5

#### Exemptions

The full list of Exemptions applicable to the A330-941 is defined below:

Exemption No. 17129 dated October 26, 2016. This Exemption from 14 CFR 25.98 l(a)(3) is granted to Airbus as it relates to the Model A330-300 fuel trim tank structural lightning protection (Airbus modification # 204495 “Stabilizers – Horizontal Stabilizer – Define lateral box for weight reduction”).

Exemption No. 17581, dated September 29, 2017. This partial grant of exemption from Section §§ 25.841(a)(2)(i) and (ii), and (a)(3), Amendment 25-87, will permit cabin pressure altitude to exceed 40,000 feet for 1 minute, but not to exceed 41,500 feet for any duration, and permit cabin pressure altitude to exceed 25,000 feet for more than 2 minutes, but not more than 3 minutes, after decompression.

Exemption No. 17601, dated October 13, 2017. This exemption is granted for the requirements of 14 CFR part 25, appendix K, section K25.1.4(a)(2) as they relate to concurrent power of the fuel boost pumps in each main fuel tank and will allow to show that the airplanes

are capable of continuously providing fuel pressure to all engines when only powered by an independent electrical power source other than the three power sources required in section K25.1.3(b) of appendix K, without maintaining simultaneous power to all individual fuel boost pumps. This exemption relates to Model A330 series airplanes ETOPS beyond 180 minutes approval. Airbus will complete this under a post TC type design change.

Exemption No. 18136, dated February 28, 2019. This exemption is granted for the requirements of 14 CFR 25.813(e), amendment 25-116, and 14 CFR 121.310(f)(5) and (6) to the extent necessary to allow the installation of doors on mini-suites.

#### Noise standards

14 CFR part 36. Amendments 36-1 through Amendment 36-31. for Stage 5.

#### Fuel venting and exhaust emissions standards

14 CFR part 34, Amendments 34-1 through 34-5A.

#### Part 26

14 CFR part 26. Amendments 26-1 through 26-6.

#### 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. At this time, the FAA identified the following subject for further review and evaluation:

##### a) In-Flight Engine Restart

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.

#### Equipment

- The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.
- Cabin furnishings, equipment and arrangement shall conform to the following specification:
  - 00F252K0005/C01 for cabin seats,
  - 00F252K0006/C01 for galley,
  - 00F252K0020/C01 for cabin attendant seat

#### Airplane Flight Manual

Airplane operation must be in accordance with the EASA Approved Airplane Flight Manual (AFM), US version, listed below, or later EASA approved revision applicable to the specific airplane model, modification status and serial number.

Model A330-900	Airbus Document Reference	Revision No.	Date
-941	STL 33000	1	September, 2018

#### Data Pertinent to All Model

**See Section VI, Data Pertinent to All Model A330-200, A330-200 Freighter, A330-300, A330-800 and A330-900 Series airplanes.**  
 For information on Fuel, Airspeed Limits, Center of Gravity Limits, Datum, Leveling Means, Minimum Crew, Maximum Operating Altitude, Control Surface Movements, Production Basis, Hydraulic Fluids, Auxiliary Power Unit (APU), Tires, Environmental requirements for noise, Manufacturer's Serial Numbers, Service Information, information on Import Requirements and General Notes

**VI. Data Pertinent to All Model A330-200, A330-200 Freighter, A330-300, A330-800 and A330-900 Series airplanes:****Fuel**

Aircraft	Specification			
	Nomenclature	United States	France	United Kingdom
A330-201 A330-202 A330-203 A330-301 A330-302 A330-303	Kerosene (conform to GE specification D50TF2 with current exception of JP4 and JET B)	ASTM D 1655 (JET A) (JET A1)	AIR 3405C	DERD 2494/2453
A330-223 A330-223F A330-321 A330-322 A330-323	Fuel and fuel additives conforming to the latest applicable issue of FAA approved Pratt & Whitney Turbojet Engine Service Bulletin 2016 may be used separately or mixed in any proportions without adversely affecting the engine operation or power output.			
A330-243 A330-243F A330-341 A330-342 A330-343 A330-841 A330-941	Approved fuel and additives are identified in the relevant Operating instructions defined in the Rolls Royce Manual F-Trent – A330			

- (a) Additives: According to GE "Specific Operating Instructions", installation manual. The above mentioned fuels are also suitable for the APU.

**Airspeed Limits (Indicated Airspeed, IAS, unless otherwise stated)**

- Maximum Operating Limit Speed/Mach, VMO/MMO 330 KIAS / .86
- Design Diving Speed, VD/MD 365 KIAS / .93
- Design Maneuvering Speed, VA Refer to AFM Performance Section
- Maximum Flaps/Slats Extended Speed or Operating Speed, VFE

Configuration	Slats / Flaps / Ailerons (°)	VFE (kt)		
		A330-200/-200F/-300	A330-800/-900	
1	16/0/0	240	240	Intermediate Approach
	16/8/0	215	215	Take-off
1 + F	16/8/5	205	205	Take-off
2	20/14/10	196	-	Take-off and Approach
	20/14/10	-	196	Take-off
	20/14/0	-	196	Approach
3	23/22/10	186	-	Take-off, Approach, and Landing
	23/22/10	-	186	Take-off
	23/22/0	-	186	Approach
FULL	23/32/10	180	-	Landing
	23/22/0	-	180	

- Minimum Control Speed, VMC Refer to AFM performance Section.  
(Performance Engineering Program/OCTOPUS)
- Landing Gear Speeds:
  - Maximum Speed with Landing Gear Operating (Extension and Retraction) VLO 250 KIAS / .55M
  - Maximum Speed with Landing Gear Locked Down, VLE 250 KIAS / .55M
  - Tire Limit Speed (Ground Speed) 203 KIAS (235mph)

### **Center of Gravity Limits**

Refer to EASA-Approved Airplane Flight Manual, US Version, Limitations Section for center of gravity envelope.

Note: 0% MAC is located 1359.59 in. (34.532m) from the datum line

### **Datum**

The aircraft reference zero datum point is located 251.29 in. (6.3825 m) forward of the nose section, 275.6 in. (7m) under the fuselage centerline (datum line).

### **Leveling Means**

Inclinometer on cabin seat track rails (refer to WBM chapter 1.80).

### **Minimum Crew**

2 – Pilots

### **Maximum Operating Altitude**

Basic: 41,100 feet (12,527 m) slats and flaps retracted (clean)

Option: 41,450 feet (12,634 m) slats and flaps retracted (clean) with modification 52536

20,000 feet (6,096 m) slats or slats/flaps extended.

### **Control Surface Movements**

Total one-way travel in each direction of each movable control surface on the aircraft:

Control Surface	Maximum Travel	
	A330-200/-200F/-300	A330-800/-900
Aileron	+25 /- 25°	+25 /- 25°
#1 Spoilers	Speed Brake 23°	Speed Brake 23°
	Lift Dumper 35°	Lift Dumper 35°
#2,3 Spoilers	Roll 35°	Roll 35°
	Speed Brake 30°	Speed Brake 30°
	Lift Dumper 50°	Emergency Descent: up to 40°
		Lift Dumper 50°
#4,5,6 Spoilers	Roll 35°	Roll 35°
	Speed Brake 30°	Speed Brake 30°
		Emergency Descent: up to 40°
	Lift Dumper 50°	Lift Dumper 50°
Aileron Droop	10°	10° take-off 0° approach
Flaps	32°	32°
Slats	23°	23°
Stabilizers	+2°/-14°	+2°/-14°
Elevator	+15°/-30°	+15°/-30°
Rudder	+30°/-30°	+30°/-30°

### **Environmental requirements for noise**

#### A330-201, A330-202, A330-203 and A330-223

14 CFR Part 36, effective December 1, 1969, including Amendments 36-1 through 36-21. Recertified to 14 CFR part 36 Stage 4, effective December 1, 1969, as amended by amendments 36-1 through 36-28.

A330-243 fitted with RR Trent 772B-60 engines are compliant with Stage 5 noise requirements of 14 CFR part 36.

#### A330-301, A330-302, A330-303, A330-321, A330-322, and A330-323

14 CFR Part 36 as amended by amendments 36-1 through 36-20. Recertified to 14 CFR part 36 Stage 4, effective December 1, 1969, as amended by amendments 36-1 through 36-28.

A330-341 fitted with RR Trent 768-60 engines, A330-342 fitted with RR Trent 772-60 engines and A330-343 fitted with RR Trent 772B-60 engines are compliant with Stage 5 noise requirements of 14 CFR part 36.

A330-200 Freighter

A330-223F fitted with PW4170 engines are compliant with Stage 4 noise requirements of 14 CFR part 36 as amended by 36-1 through 36-28.

A330-243F fitted with RR Trent 772B-60 engines are compliant with Stage 5 noise requirements of 14 CFR part 36.

A330-800

14 CFR Part 36 as amended by amendments 36-1 through 36-31, compliant with Stage 5 noise requirements of 14 CFR part 36.

A330-900

14 CFR Part 36 as amended by amendments 36-1 through 36-31, compliant with Stage 5 noise requirements of 14 CFR part 36.

**Manufacturer's Serial Numbers/Production Basis**

From July 21, 2008, A330 aircraft, all series and models, are produced in France under production approval reference EASA.21G.0001 issued by EASA on July 21, 2008, prior that date all A330 aircraft, all series and models, are produced in France under production approval FR.21G.0035 (formerly FG 035) issued by the DGAC (on behalf of EASA) to Airbus.

**Import Requirements**

The FAA can issue a U.S. airworthiness certificate based on either an EASA Export Certificate of Airworthiness (Export C of A) signed by a representative of the European Union Aviation Safety Agency (EASA), or a French "Certificat de Navigabilite pour Exportation" signed by a representative of the Direction Generale de l'Aviation Civile (DGAC) of France on behalf of the European Community.

Refer to the applicable bilateral agreement to verify eligibility for import based on the scope of the agreement, to identify any required statements 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*, provisions for Import Aircraft, for requirements for issuance of an airworthiness certificate.

The U.S. airworthiness certification basis for aircraft type certificated under 14CFR 21.29 and exported by the country of manufacture is §§ 21.183(c) or 21.185(c). The U.S. airworthiness certification basis for aircraft type certificated under § 21.29 exported from countries other than the country manufacture (e.g., third party country) is §§ 21.183(d) or 21.185(b). These sections provide that U.S. airworthiness certificates are issued only if the Administrator finds "that the aircraft conforms to the type design and is in a condition for safe operation." Notwithstanding that §§ 21.183(d) and 21.185(b) do not specifically address or require certification by the foreign civil airworthiness authority of the country of manufacture, such certification is the only practical way for an applicant to show, and the FAA to find conformity to the FAA-approved type design and condition for safe operation.

**FAA Required Modification List for Airbus Model A330 Aircraft**

Prior to issuance of a Standard Airworthiness Certificate on Airbus A330-200 or A330-300 model aircraft, all modifications shown on the (Model A330) Required Modification List (RML) with compliance times already past, must be accomplished before the aircraft can be found to be in a condition for safe operation.

RML modifications with compliance times already past means that relative to the date of issuance of an Airworthiness Certificate for an individual aircraft, the compliance time of the RML item in calendar time and/or flight hours and/or flight cycles has been exceeded.

All future required modifications shown on the RML must be incorporated into the operator's maintenance or inspection program prior to placement of the aircraft into operation [just as for future airworthiness limitations listed in the Airworthiness Limitation Section (ALS)]. These future RML modifications must be incorporated prior to the compliance time specified in the RML and must remain with the airplane records. In the event of any transfer of the airplane to another operator these RML requirements must continue to be complied with and incorporated into the new operator's maintenance program.

Future RML modifications means that relative to the date of issuance of an Airworthiness Certificate for an individual aircraft, the compliance time of the RML item in calendar time and/or flight hours and/or flight cycles has not yet been exceeded.

The RML was finalized through its publication in TCDS Revision 4 and requirements will not be added by later TCDS revisions. Therefore, the RML in TCDS A46NM Revision 4 or any later TCDS revision are equivalent and acceptable for compliance. All future modifications that the FAA determines must be accomplished on U.S. registered aircraft will be addressed by issuance of an Airworthiness Directive (AD).

Authority for these required modifications is given per the airworthiness certification provisions of 49 U.S.C. 44704 (c), which states "the Administrator may include in an airworthiness certificate terms required in the interest of safety". "Terms required in the interest of safety" include actions to correct unsafe conditions issued by the foreign authority of the state of design that also meet FAA criteria for corrective action. This law also gives the FAA the authority to adopt § 21.183(c) and (d), which form the regulatory basis for the issue of standard U.S. airworthiness certificates on imported products. The modifications identified in the list below are required in the interest of safety and are necessary for this airplane to be in a condition for safe operation.

A Notice of Policy Statement announcing the FAA's policy with respect to foreign mandatory continued airworthiness information, when no aircraft of the affected type design are currently operating in the U.S. was published in the Federal Register on May 11, 1998, docket 98-11648. Additional guidance is contained in FAA Advisory Circular (AC) 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products Imported into the United States.

#### Alternative Methods of Compliance to an RML modification:

For each RML modification, an alternative method of compliance (AMOC) or adjustment of the compliance time may be used if approved by the Manager, Large Aircraft Section, International Validations Branch, Compliance & Airworthiness Division, Aircraft Certification Service, 2200 South 216th Street Des Moines, Washington 98198, telephone (206)-231-3219. Operators shall submit their request through an appropriate FAA Principle Maintenance Inspector, who may add comments and then send it to the Manager, Large Aircraft Section, International Validations Branch.

#### FAA Compliance findings to the A330 RML:

The FAA has accepted:

- (1) Model A330-323 aircraft in the Airbus as-delivered configuration for MSN 524 and on as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL G01M03003568 issue 2, dated June 24, 2003) that the RML modifications applicable to model A330-323 aircraft are either part of the FAA approved type design (ref. AI/EA-N 415.1630/99 Issue 1, dated July 20, 1999), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-323 aircraft at time of delivery.
- (2) Model A330-223 aircraft in the Airbus as-delivered configuration for MSN 343 and from MSN 609 and on as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letters EAL G03D0415493, dated July 9, 2004 and G01ME1249802 Issue 2, dated July 26, 2012) that the RML modifications applicable to model A330-223 aircraft are either part of the FAA approved type design (ref. AI/EA-N 415.1223/98 Issue 2, dated August 20, 1998), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-223 aircraft at time of delivery.
- (3) Model A330-302 and -303 aircraft in the Airbus as-delivered configuration as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL G03D07012703 (for the -302) and EAL G03D07012712 (for the -303), each dated June 8, 2007) that the RML modifications applicable to model A330-302 and -303 aircraft are either part of the FAA approved type design (ref. EAL M05000400 and EAL M05000400; both at Issue 03 and dated May 2006), required to be installed at aircraft delivery by DGAC AD, or required to be installed by Airbus on all Model A330-302 and -303 aircraft at time of delivery.
- (4) Model A330-202 aircraft in the Airbus as-delivered configuration (except for MSN's 205, 211, 269 and 272) as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL LR01M08013880, dated June 20, 2008) that the RML modifications applicable to model A330-202 aircraft are either part of the FAA approved type design (ref. AI/EA-N 415.0531/98 Issue 3, dated May 25, 1998), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-202 aircraft at time of delivery.
- (5) Model A330-243 aircraft in the Airbus as-delivered configuration (except for MSN's 248, 250, 251, 254, 261, 265, 271 and 276) as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL LR01M08019406, dated August 07, 2008) that the RML modifications applicable to model A330-243 aircraft are either part of the FAA approved type design (ref. AI/EA-N 415.2406/98 Issue 1, dated December 11, 1998), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-243 aircraft at time of delivery.
- (6) Model A330-343 aircraft in the Airbus as-delivered configuration as compliant with the applicable modifications of the A330 RML. FAA acceptance is based on the Airbus statement to the FAA (ref. Airbus letter EAL LR01M10004733, dated March 03, 2010) that the RML modifications applicable to model A330-343 aircraft are either part of the FAA approved type design (ref. AIAI/EA-N 415.2027/99 Issue 1, dated October 22, 1999), required to be installed at aircraft delivery by DGAC/EASA AD, or required to be installed by Airbus on all A330-343 aircraft at time of delivery.

#### FAA Required Modification List(RML) for the Airbus Model A330 Aircraft:

The RML for the A330 is composed of items 1A through 40B as listed on the following pages.



RML #	DGAC CN #	Mod #	Mandatory Action	Applicable To:	S/B #	S/B REV(s)	Compliance Time
1A	1996-006-024(B)R1	42409	FUSELAGE - REINFORCE JOINT AT FRAMES 48 - 53.2	Airplanes without mod 43475 or without SB A330-21-3027	53-3015	1 or higher	Frames 53/53.1/53.2: Prior to 5800 total flight cycles. For frames 48 to 52: Prior to 15600 total flight cycles.
1B	1996-006-024(B)R1	42409	FUSELAGE - REINFORCE JOINT AT FRAMES 48 - 53.2	Airplanes with mod 43475 or with SB A330-21-3027	53-3015	1 or higher	Frames 53/53.1/53.2 prior to 5300 total flight cycles. For frames 48 to 52 prior to 14100 total flight cycles.
2	1997-265-056(B)R1	N/A	REVISE AMM AIRWORTHINESS LIMITS.	ALL Model A330 Airplanes	AMM CHAPTER 5	8 or higher	Prior to C of A Issuance
3	1998-539-088(B)	N/A	REPLACE FRANKENJURA EYE-END ON ELEVATOR SERVOCONTRLS	ALL Model A330 Airplanes	AOT 27-24	1 or higher	Prior to 7/09/99 or C of A Issuance; whichever occurs later
4	1999-111-093(B)	45870 AND 46231 AND 46891	INSTALL WIRING FOR E-BRAKE SHUTOFF VALVE	ALL Model A330 Airplanes	29-3054 AND 32-3083R2	3054: 0 or higher 3083: 2 or higher	Prior to 7/31/01 or C of A Issuance; whichever occurs later
5	1999-123-092(B)	43724, OR 44661, OR 44662	FLIGHT MANAGEMENT COMPUTER REPLACEMENT	ALL Model A330 Airplanes	22-3011, OR 22-3009, OR 22-3010	All SB's revision 1 or higher	Prior to 6/30/99 or C of A Issuance; whichever occurs later
6	1999-142-097(B)	46170, OR 46596	FLIGHT CONTROL UNIT CHANGE	Airplanes with Mod. 44887 OR with SB 22-3012	22-3021, OR 22-3020	1 or higher	Prior to 6/30/99 or C of A Issuance; whichever occurs later
7	1999-144-094(B)R1	45977	REPLACE RAT ACTUATOR	Airplanes with Sundstrand RAT	29-3057	1 or higher	Prior to 12/31/00 or C of A Issuance; whichever occurs later
8	1999-331-098(B)	42447	REPLACE NLG HINGE FITTING BRACKETS	ALL Model A330 Airplanes	52-3046	1 or higher	Prior to 01/21/01 or C of A Issuance; whichever occurs later
9A	1999-350-100(B)R1	46904, AND 46905	REPLACE PIVOT PINS & BELLCRANK ASSEMBLIES	-202, -223, -243, -323, -343	32-3095	1 or higher	The Later of (a) and (b): (a) Prior to 4800 total flight cycles or within 5 years since new; which ever occurs first; and (b) Prior to 06/08/01
9B	1999-350-100(B)R1	46902, AND 46903	REPLACE PIVOT PINS & BELLCRANK ASSEMBLIES	ALL Model A330 Airplanes	32-3096	1 or higher	Prior to 10 years since new or C of A Issuance; whichever occurs later
9C	1999-350-100(B)R1	46904, AND 46905	REPLACE PIVOT PINS & BELLCRANK ASSEMBLIES	-301, -321, -322, -341, -342	32-3095	1 or higher	The Later of (a) and (b): (a) Prior to 6500 total flight cycles or within 5 years since new; which ever occurs first; and (b) Prior to 06/08/01
10A	1999-406-103(B)	45307	REPLACE HORIZONTAL HYDRAULIC BRACKET	All Airplanes, except -202, with mod 43475 OR with SB 21-3027	53-3088	0 or higher	Prior to 7880 total flight cycles or 30700 total flight hrs; whichever occurs first
10B	1999-406-103(B)	45307	REPLACE HORIZONTAL HYDRAULIC BRACKET	All Airplanes, except -202, without mod 43475 OR without SB 21-3027	53-3088	0 or higher	Prior to 8620 total flight cycles or 33600 total flight hrs; whichever occurs first

RML #	DGAC CN #	Mod #	Mandatory Action	Applicable To:	S/B #	S/B REV(s)	Compliance Time
10C	1999-406-103(B)	45307	REPLACE HORIZONTAL HYDRAULIC BRACKET	-202	53-3088	0 or higher	Prior to 8540 total flight cycles or 33300 total flight hrs, whichever occurs first
11	1999-442-104(B)	46820, OR 46865	PASSENGER/ CREW DOOR FRAME LININGS	ALL Airplanes with mod 44461 OR 44462 OR 44463 OR 44464 OR 44465	25-3096	1 or higher	Prior to 11/03/05 or C of A Issuance; whichever occurs later
12A	1999-449-105(B)	45899	REINFORCE FRAME 40	-202, -223	53-3093	2 or higher	Prior to 9700 Total flight cycles or 28800 total flight hours; whichever occurs first
12B	1999-449-105(B)	45899	REINFORCE FRAME 40	-301, -321,-322, -341, -342	53-3093	1 or higher	Prior to 7320 total flight cycles or 26130 total flight Hours; whichever occurs first
13	1999-508-106(B)	41652, OR 43904	MODIFY LOWER SECTIONS OF FRAME 48 TO 53.2	ALL Model A330 Airplanes	53-3062	0 or higher	Prior to 2300 Total flight cycles or C of A Issuance; whichever occurs later
14	95-053-009(B)R3	44049	REPLACE HYDRAULIC SENSE LINES	Airplanes equipped with PW model 4164 or 4168 engines	29-3019	1 or higher	Prior to 10/31/97 or C of A Issuance; whichever occurs later
15	95-248-022(B)	42607	MOD - FUSELAGE STRINGER 39	ALL Model A330 Airplanes	53-3021	0 or higher	Prior to 3800 total flight cycles
16	96-106-030(B)	41849 OR 43364	AFT CARGO COMPARTMENT DOOR	ALL Model A330 Airplanes	52-3023	0 or higher	Prior to 6000 total flight cycles
17	96-134-031(B)R2 AND 97-266-057(B)	[45271]; OR [44143 AND SB-A330-32-3070R0]	LANDING GEAR FREE FALL EXTENSION ELECTRIC CIRCUIT	ALL Model A330 Airplanes	[32-3048R3] OR [32-3048R0, R1 or R2 AND 32-3070R0)	-3048:3 or higher, OR 3048: 0,1, or 2 AND 3070: 0 or higher	Prior to 3/23/99 or C of A Issuance; whichever occurs later
18	96-136-032(B)R1	43689 AND 44603	ELECTRICAL POWER-APU FUEL PUMPS ELEC SUPPLY	ALL Model A330 Airplanes	28-3041	3 or higher	Prior to 3/1/98 or C of A Issuance; whichever occurs later
19	96-159-033(B)R2	44173, OR 44237	MLG- SHORTENING MECHANISM BELLCRANK	ALL Model A330 Airplanes without Mod 43029 installed	32-3047	2 or higher	Prior to 1/07/99 or C of A Issuance; whichever occurs later
20	96-184-036(B)R2	46558	ICE PROTECTION-WING ANTI ICE VALVES	ALL Model A330 Airplanes	S/B 30-3020	-3020: 0 or higher	Prior to C of A Issuance
21	97-004-041(B)	43697, OR 43761	REAR FUSELAGE CARGO DOOR FRAME	ALL Model A330 Airplanes	53-3048	0 or higher	Prior to 7000 total flight cycles
22	97-154-049(B)R1	44457 AND 45022	RADIO ANTENNA ALTIMETER "THOMSON"	ALL Model A330 Airplanes fitted with Radio Altimeter P/N 9599-607-19501	34-3044 AND 21-3053 AND 92-3017	All S/Bs: 0 or higher	Prior to 10/31/98 or C of A Issuance; whichever occurs later
23	97-178-051(B)	44918	A/C RAM AIR OUTLET DUCT	ALL Model A330 Airplanes	21-3059	0 or higher	Prior to 6/30/98 or C of A Issuance; whichever occurs later
24	97-179-052(B)	45088, OR 45087	FWD FLAP TRACKS	ALL Model A330 Airplanes	57-3048	1 or higher	Prior to 3500 total flight hours

RML #	DGAC CN #	Mod #	Mandatory Action	Applicable To:	S/B #	S/B REV(s)	Compliance Time
25	97-204-053(B)	41856, OR 45224	FWD FUSELAGE-REINFORCE DBLR/OUTFLOW VALVE	ALL Model A330 Airplanes	53-3084	0 or higher	Prior to 7500 total flight cycles
26	97-361-058(B)R2	44511 AND 41671	MLG-SHORTENING MECHANISM BELLCRANK BOLTS	ALL Model A330 Airplanes without Mod 43029 installed	32-3056	1 or higher	Prior to 12000 total flight cycles on the MLG
27	97-386-060(B)	45077 OR 45564	HOT TRANSFO-RECTIFIERS OPERATION	ALL Model A330 Airplanes	24-3019	1 or higher	Prior to 12/31/98 or C of A Issuance; whichever occurs later
28	98-022-062(B)R1	46115	PNEUMATIC LEAK DETECTION SYSTEM WIRING	ALL Model A330 Airplanes	AOT 36-04 OR SB 36-3012	AOT: 0 or higher -3012: 0 or higher	Prior to 12/16/98 or C of A Issuance; whichever occurs later
29	98-023-063(B)	43441, OR 41848	CENTER FUSELAGE REINFORCE FR 53.3/53.5	ALL Model A330 Airplanes with Mod. 40161	53-3039	1 or higher	Prior to 10000 total flight cycles
30	98-024-064(B)	44360, OR 44440	REINFORCE KEEL ANGLE OF FRONT SPAR FR40	All Airplanes with Mod. 41652	57-3046	0 or higher	Prior to 4000 total flight cycles
31	98-098-065(B)	[42351A ND 42353 AND 43438]; OR 41848	REINFORCE DOORFRAMES/ EMERGENCY EXITS	Airplanes with Mod. 40161	53-3023	0 or higher	Prior to 10000 total flight cycles
32	98-099-066(B)	42969 AND 45580	FUEL DENSITOMETERS - ATA 28	ALL Model A330 Airplanes	28-3044R1 OR 28-3053 and 28-3044R0	3044: 1 or higher 3053: 0 or higher	Prior to 6 Years since new
33	98-101-068(B)	43306	MODIFY DOOR STOP FITTING ON PASS DOORS	ALL Model A330 Airplanes	53-3044	1 or higher	Prior to 10000 total flight cycles
34	98-268-073(B)R1	45534	REPLACE MLG DOOR	All Airplanes with MLG door S/N AA1001 to AA1196; or SPAA001 to SPAA015	52-3049	0 or higher	Prior to 2/18/00 or C of A Issuance; whichever occurs later
35	98-291-074(B)	44030, OR 43761	REINFORCE FRAME 65 REAR FUSELAGE	ALL Model A330-300 Airplanes	53-3058	2 or higher	Prior to 10000 total flight cycles
36	98-352-076(B)	46416	MOD MLG O/B PIN / BRAKE ROD TO MAIN STRUT	ALL Model A330 Airplanes	32-3084	2 or higher	Prior to 1/19/99 or C of A Issuance; whichever occurs later
37	98-454-082(B)	[43577]; OR [41652 AND 44440]; OR [41652 AND 44360]	LOWER KEELBEAM FITTING/FWD LOWER SHELL	ALL Model A330 Airplanes	57-3032	3 or higher	Prior to 6600 Total flight cycles or 21800 Total Flight Hrs, whichever occurs first
38A	98-484-081(B)R1	46472	REPLACE PIVOT PINS OF SLIDE LOCKING MECHANISM	All Airplanes with 44860 (Type 1 Emerg Exits)	52-3050	1 or higher	Prior to 3/12/00 or C of A Issuance; whichever occurs later

RML #	DGAC CN #	Mod #	Mandatory Action	Applicable To:	S/B #	S/B REV(s)	Compliance Time
38B	98-484-081(B)R1	46471	REPLACE PIVOT PINS OF SLIDE LOCKING MECHANISM	All Airplanes with 44330 (Mid & Aft Pax Doors)	52-3050	1 or higher	Prior to 3/12/00 or C of A Issuance; whichever occurs later
38C	98-484-081(B)R1	46473	REPLACE PIVOT PINS OF SLIDE LOCKING MECHANISM	All Airplanes with 44332 (Type A Emerg Exits)	52-3050	1 or higher	Prior to 3/12/00 or C of A Issuance; whichever occurs later
39	98-507-085(B)	[45090], OR [45155], OR [45197], OR [45904], OR [45904 and 45905]	REPLACE-DIAPHRAGM FOR EMERGENCY ACTUATOR	ALL Model A330 Airplanes	52-3048	1 or higher	Prior to 12/16/01 or C of A Issuance; whichever occurs later
40A	98-538-087(B)R1	46353	MODIFY DOOR STAY MECHANISM EMERG EXITS	All Airplanes with 44332 (Type A Emerg Exits)	52-3051	1 or higher	Prior to 3/31/00 or C of A Issuance; whichever occurs later
40B	98-538-087(B)R1	46352	MODIFY DOOR STAY MECHANISM MID/AFT EXITS	All Airplanes with 44330 (Mid & Aft Pax Doors)	52-3051	1 or higher	Prior to 3/31/00 or C of A Issuance; whichever occurs later

**Hydraulic Fluids**

Fluid specifications: TYPE IV and TYPE V (NSA 307110)

**Auxiliary Power Unit (APU)**

Garrett AiResearch (Company name changed to Honeywell International Inc. in 1999)	GTCP 331-350C (Specification 31-7677A)
Maximum Allowable Speed	(107%) 41,730 RPM
Maximum Gas Temperature: Turbine Outlet Temperature Starting	650 °C 1250 °C

Approved oils: See report GT-7800 or APU Maintenance Manual.

**Tires**

Refer to Service Bulletin (SB) A330-32-3004.

**Service Information**

Each of the documents listed below that contain a statement that it is approved by the European Union 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 by 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,
- Vendor manuals referenced in Airbus service bulletins
- Repair Instructions.
- Structural repair manuals,
- US version of Aircraft flight manuals,

Design changes that are contained in Airbus Service Bulletins and that are classified as Level 1 Major, or Non-Basic, in accordance with the Technical implementation procedures for airworthiness and environmental certification between the FAA of the USA and the EASA of the European Union must be approved by the FAA.

**VII. General Notes: (All Models of A330 Series Airplanes)****Note 1:**

A current Weight and Balance report including list of the equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each aircraft at the time of original airworthiness certification and at all times thereafter. Refer to Documents:

- 00G080A0006/C2S for A330-200 and A330-200F series aircraft,
- 00G080A0006/C3S for A330-300 series aircraft
- 00G080A3WBM/C8S for A330-800 series aircraft.
- 00G080A3WBM/C9S for A330-900 series aircraft.

**Note 2:**

All placards required by either the AFM, the applicable operating rules, or the certification basis must be installed in the airplane.

**Note 3:**

Instructions for Continued Airworthiness required under § 21.50:

- Initial minimum maintenance requirements and their frequencies to be used in the development of an approved maintenance program for the aircraft:
  - A330 Maintenance Review Board Report (Certification Document 00G050A0002/C01), and 00G050A17MA/C01 for the A330-841/-941 approved by the FAA.
- Instructions for Continued Airworthiness and airworthiness limitations:
  - Instructions and airworthiness limitations applicable to Safe Life Airworthiness Limitation Items (SL ALI) are provided in the A330 Airworthiness Limitations Section (ALS) Part 1:  
**ALS Part 1:** Safe Life Airworthiness Limitation Items (SL-ALI), Revision 11, dated July 1, 2021.
  - Instructions and airworthiness limitations applicable to Damage Tolerant Airworthiness Limitation Items (DT ALI) are provided in the A330 Airworthiness Limitations Section (ALS) Part 2:  
**ALS Part 2:** Damage Tolerant Airworthiness Limitation Items (DT - ALI), Revision 04, dated July 1, 2021.
  - Certification Maintenance Requirements (CMR's) are provided in the A330 Airworthiness Limitations Section (ALS) Part 3:  
**ALS Part 3:** Certification Maintenance Requirements (CMR), Revision 07, dated July 1, 2021.
  - Instructions and airworthiness limitations applicable to Aging Systems Maintenance (ASM) are provided in the A330 Airworthiness Limitations Section (ALS) Part 4:  
**ALS Part 4:** System Equipment Maintenance Requirements (SEMR), Revision 08, dated July 1, 2021.
  - Fuel Airworthiness Limitations (FAL) are provided in the A330 Airworthiness Limitations Section (ALS) Part 5:  
**ALS Part 5:** Fuel Airworthiness Limitations (FAL), Revision 04, dated July 1, 2021.

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:**

Compliance with the FAA Required Modification List for Airbus Model A330 Aircraft as included under the Import Requirements section of TCDS Revision 4, dated March 21, 2000 or later TCDS revision, is necessary for an A330 aircraft to be found in a condition for safe operation. The FAA has accepted:

- Model A330-323 aircraft in the Airbus as-delivered configuration for MSN 524 and on as compliant with the applicable modifications of the A330 RML.
- Model A330-223 aircraft in the Airbus as-delivered configuration for MSN 343 and from MSN 609 and on as compliant with the applicable modifications of the A330 RML.
- Model A330-302 and -303 aircraft in the Airbus as-delivered configuration as compliant with the applicable modifications of the A330 RML.
- Model A330-202 aircraft in the Airbus as-delivered configuration (except for MSN's 205, 211, 269 and 272) as compliant with the applicable modifications of the A330 RML.

- Model A330-243 aircraft in the Airbus as-delivered configuration (except for MSN's 248, 250, 254, 261, 265, 271 and 276) as compliant with the applicable modifications of the A330 RML.
- Model A330-343 aircraft in the Airbus as-delivered configuration as compliant with the applicable modifications of the A330 RML.

**Note 5:**

A330-301: If modification 42792, "Autoflight-FMGEC-Introduce L5 Standard on A330 Aircraft," is embodied the aircraft is qualified for CAT III precision approach and autoland. This does not constitute operational approval.

**Note 6:**

A330-321 and A330-322: If modification 43397, "Autoflight-FMGEC-Certify CAT III Autoland for A330 with P&W engines," is embodied, the aircraft is qualified for CAT III precision approach and autoland. This does not constitute an operational approval.

**Note 7:**

A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-302, A330-303, A330-323, A330-341, A330-342, A330-343 and A330-941: The aircraft Type Design is qualified for CAT III precision approach and autoland. This does not constitute an operational approval.

**Note 8:**

ETOPS: The Type Design reliability and performance of the airplane-engine combinations listed below have been evaluated in accordance with AC 120-42A or 14 CFR 25.1535 and found suitable for 180-minute extended operations (ETOPS) when the configuration, maintenance and procedures (CMP) standard contained in the following listed documents are met. This finding does not constitute operational approval to conduct ETOPS.

- Model A330-323. The CMP document AI/EA 5001, Revision 1, dated October 21, 1999 or document LR2/FAA: 14 CFR 25.1535/CMP, Revision 2, dated October 15, 2009.
- Model A330-223. The CMP document AI/EA 5001, Revision 2, dated July 12, 2004 or document LR2/FAA: 14 CFR 25.1535/CMP, Revision 2, dated October 15, 2009.
- Models A330-201, A330-202, A330-203, A330-243, A330-301, A330-302, A330-303, A330-341, A330-342 and A330-343. The CMP document LR2/FAA: 14 CFR 25.1535/CMP, Revision 1, dated November 9, 2007.
- Models A330-321 and A330-322. The CMP document LR2/FAA: 14 CFR 25.1535/CMP, Revision 1, dated November 9, 2007 or LR2/FAA: 14 CFR 25.1535/CMP, Revision 3, dated December 6, 2012 when equipped with PW4164-1D or PW4168-1D.
- Models A330-223F and A330-243F. The CMP document LR2/FAA: 14 CFR 25.1535/CMP, Revision 3, dated December 6, 2012.
- Models A330-302, A330-303, A330-323 and A330-343 with optional Airbus modification # Project G3ActCT: "Fuel - Tanks - Activation of Center Tank on A330-300". The CMP document LR2/FAA: 14 CFR 25.1535/CMP, Revision 04, dated May 7, 2015.
- Model A330-941. The CMP document LR2/FAA: 14 CFR 25.1535/CMP, Revision 07, dated January 14, 2019.
- Model A330-841. The CMP document LR2/FAA: 14 CFR 25.1535/CMP, Revision 10, dated February 12, 2020.

For Model A330-201, A330-202, A330-203, A330-301, A330-302 and A330-303 equipped with Modification 205455 the type design reliability and performance has been evaluated in accordance with 14 CFR 25.1535 and found suitable for greater than 180-minute extended operations (ETOPS) when the configuration, maintenance, and procedures standard contained in the CMP document LR2/FAA: 14 CFR 25.1535/CMP, Revision 06, dated October 26, 2018, are met.

**Note 9:**

"Enhanced" refers to those model A330 aircraft identified by Weight Variant (WV) 050 or WV 052. Aircraft with either of these WV's have the modifications defined by Level 1 major change project: "Fly By Wire (FBW) and Structural Enhanced Changes installed in production."

**Note 10:**

If modification FG-FRS 58723 Issue 2 "Install fuel tank flammability reduction system on A330/A340" is embodied on A330-201/-202/-203/-223/-243 airplanes, the airplane is compliant with 14 CFR Part 25 appendix M & N at amendment 25-125, and Section 26.33 at amendment 26-3, and design changes to the fuel system introduced with modification FG-FRS 58723 Issue 2 are in compliance with 14 CFR Section 25.981(a) & (b) at amendment 25-102.

**Note 11:**

If modification 46549 (intermix between CF6-80E1A4 (derated) and CF6-80E1A2 engines, which are physically identical) is embodied on A330-202 Model aircraft, the engine denomination changes to CF6-80E1A4/A2.

**Note 12:**

If modification 52776 (increase thrust from 70.000 lbs to 72.000 lbs, corresponding to the CF6-80E1A3 nominal thrust) is embodied on A330-202 or A330-302 Model aircraft, the engine denomination changes to CF6-80E1A4/B.

**Note 13:**

If modifications ## 52873 issue 1, 53321 issue 1, 53322 issue 1, 53323 issue 1, 53324 issue 2, 53325 issue 4, 53326 issue 1, 53541 issue 1, 53815 issue 2, 54302 issue 1 and 54566 issue 1 are embodied on A330-201/-202/-203/-223/-243 airplanes or on A330-301/-302/-303/-321/-322/-323/-341/-342/-343 airplanes, the airplane is compliant with 14 CFR Section 25.856 (a) at Amendment 25-111, Improved Flammability standards for Thermal/acoustic insulation materials. (FAA project AT10215IB-T).

**Note 14:**

If modification # 204093 Issue1 is embodied, only one HF remains available on the aircraft instead of two as defined in the applicable Type design definition.

**Note 15:**

If modification # 204323 is embodied on A330-302 Model equipped with GE CF6-80E1A4 engine and with Weight Variant 050 and 052 thrust rating of GE CF6-80E1A2 engine (64,530 lbs.) can be applied.

**Note 16:**

If modification # 204324 is embodied on A330-323 Model equipped with PW 4170 engine and with Weight Variant 050 and 052 thrust rating of PW 4164-1D engine (64,500 lbs.) can be applied.

**Note 17:**

If modification # 204325 is embodied on A330-343 Model equipped with RR Trent 772B-60 engine and with Weight Variant 050 and 052 thrust rating of RR Trent 768-60 engine (67,500 lbs.) can be applied.

**Note 18:**

A330-841: If modification 208875 "Certification of the automatic approaches and Autoland capabilities in ILS CAT II, CAT IIIA, CAT IIIB on A330-841" is embodied, the aircraft is qualified for automatic approaches and autoland capabilities in ILS CAT II, CAT IIIA/B. This does not constitute operational approval.

**Note 19:**

A330-941: If modification 206292 "Auto Flight – General – Introduce automatic approach and autoland on NEO-900" is embodied, the aircraft is qualified for automatic approaches and autoland capabilities in ILS CAT II, CAT IIIA/B. This does not constitute operational approval.

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