

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A46NM
Revision 26
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

July 28, 2014

FAA TYPE CERTIFICATE DATA SHEET NO. A46NM

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: Airbus
1, Rond-Point Maurice Bellonte
31707 Blagnac
France

I. Type A330-200 Series Transport Category Airplanes:

- 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

Model:	Definition of Reference Airplane by Airbus Documents:
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/COS.
A330-203	FAA A330-203 Type Design, ref. EAL 415.1988/02 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/COS.
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/COS.

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

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Fuel:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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 • Take-off (5 mn) ¹ (flat rated 30° C) • maximum continuous (flat rated 25° C)	64,530 lbs 60,400 lbs	66,870 lbs 60,400 lbs	68, 530 lbs 60,400 lbs
Maximum Engine Speed • N1 rpm (%) • N2 rpm (%)	3,835 (115.5%) 11,105 (113%)	3,835 (115.5%) 11,105 (113%)	3,835 (115.5%) 11,105 (113%)
Maximum Gas Temperature • Take-off (5mn) ¹ • Maximum Continuous • Starting ²	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 • Continuous Operation • Transient (15 mn max.) • Minimum Oil Pressure (PSI)	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 • Take-off (5 mn) ¹ (flat rated 30° C) • maximum continuous (flat rated 25° C)	68,600 lbs 59,357 lbs	70,000 lbs 59,357 lbs	71,100 lbs 63,560 lbs
Maximum Engine Speed • N1 rpm (%) • N2 rpm (%)	3,600 10,450	3,680 10,450	3,861 (99%) 10,611 (100%)
Maximum Gas Temperature • Take-off (5mn) ¹ • Maximum Continuous • Starting ²	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 • Continuous Operation • Transient (15 mn max.) • Minimum Oil Pressure (PSI)	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		-Aeroshell Turbine Oil (Royco) 500, 555, 560 -Mobil Jet Oil II 254, 291 -Exxon Turbo Oil 2197

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.

Airspeed Limits

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Center of Gravity Limits:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Datum:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Leveling Means:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Maximum Weight:

Model A330-200 Airplane	A330-201/-202/-203/-223/-243	A330-202/-223/-243	A330-201/-202/-203/-223/-243	
Weight Variant	020 (Basic) kg / lb	021 (MOD 46892) kg / lb	050 (MOD 51802) kg / lb	052 (MOD 51804) kg / lb
Maximum Take-off Weight, MTOW	230,000 / 507,063	230,000 / 507,063	230,000 / 507,063	233,000 / 513,676
Maximum Landing Weight, MLW	180,000 / 396,831	182,000 / 401,241	180,000 / 396,831	182,000 / 401,241
Maximum Zero Fuel Weight, MZFW	168,000 / 370,376	170,000 / 374,785	168,000 / 370,376	170,000 / 374,785

Model A330-200 Airplane	A330-201/-202/-203/-223/-243				
Weight Variant	054 (MOD 54106) kg / lb	057 (MOD58859) (MOD201436 retrofit) kg / lb	058 (MOD58860) (MOD201437 retrofit) kg / lb	061 (MOD 200561)	062 (MOD 201701) kg / lb
Maximum Take-off Weight, MTOW	230,000 / 507,063	236,000 / 520,291	238,000 / 524,700	230,000 / 507,063	238,000 / 524,700
Maximum Landing Weight, MLW	182,000 / 401,241	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	170,000 / 374,785	168,000 / 370,376	168,000 / 370,376	From 168,000 / 370,376 to 170,000 / 374,785 (depending on TOW)

Minimum Crew:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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 / 41,606
Aft	15,241 / 33,606
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: Airbus Document 00G080A0006/C2S for A330-200 airplanes.

Fuel Capacity:

Tank	3 Tank Airplane			
	Usable Fuel		Unusable Fuel	
	liters	gallons	liters	gallons
Wing	91,300	24,121	348	70
Center	41,560	10,980	83	21.9
Trim Tank	6,230	1,646	6	1.6
Total	139,090	36,746	437	115.5

Maximum Operating Altitude:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Control Surface Movements:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Manufacturer's Serial Numbers:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Import Requirements:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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
 - § 25.851 as amended by Amendment 25-74
 - The following sections of 14 CFR part 25 as amended through Amendment 25-72:

§ 25.21	§ 25.693
§ 25.29	§ 25.723
§ 25.111	§ 25.729
§ 25.147	§ 25.731
§ 25.177	§ 25.733
§ 25.181	§ 25.735
§ 25.205	§ 25.772
§ 25.307	§ 25.779
§ 25.331	§ 25.783
§ 25.341	§ 25.933
§ 25.343	§ 25.979
§ 25.345	§ 25.1093
§ 25.351	§ 25.1381
§ 25.361	§ 25.1419
§ 25.373	§ 25.1522
§ 25.395	§ 25.1533
§ 25.397	§ 25.1543
§ 25.415	§ 25.1551
§ 25.459	§ 25.1581
§ 25.571 (b)	§ 25.1583
§ 25.613 (Vertical stabilizer only)	§ 25.1587
§ 25.615 (Vertical stabilizer only)	

- 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 35 inch free head strike envelope.

c. Special conditions in accordance with § 21.16.

1. Special conditions originally written for the A330-300 certification basis that are also included in the A330-200 certification basis: (published in the Federal Register 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 for the optional installation of the Lower Deck Mobile Crew Rest Compartment: (published in the Federal Register on January 6, 2005, Docket No. NM287, Special Condition No. 25-281-SC)

Lower Deck Mobile Crew Rest (LD-MCR) Compartment (optional installation)

3. Special conditions issued for Seats With Inflatable Lap Belts, published in the Federal Register November 03, 2009, Docket No. NM-418, Special Conditions No. 25-395-SC
4. Special conditions issued for Seats with Non-Traditional, Large, Non-Metallic Panels, published in the Federal Register January 4, 2010, Docket No. NM-424, Special Conditions No. 25-400 -SC

d. 14 CFR part 34, effective September 10, 1990, including Amendment 34-1.

e. 14 CFR part 36, effective December 1, 1969, including Amendments 36-1 through 36-21.

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 have been made in accordance with § 21.21(b)(1) for the following sections:

- (1) § 25.335(d) for design airspeeds
- (2) § 25.345 for high lift devices
- (3) § 25.349 for control surface loads
- (4) § 25.351(b) for unsymmetrical loads
- (5) § 25.371 for gyroscopic loads
- (6) § 25.373 for speed control devices
- (7) §§ 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
- (8) §§ 25.933(a)(1)(ii), 25.1309(b)(1) for flight critical thrust reverser
- (9) § 25.1203(d) for turbine overheat detection (RR Trent 700 powered A330-243 only)
- (10) § 25.1305(c)(6) Warning means for engine fuel filter contamination (RR Trent 700 powered A330-243 only)
- (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-1Revision 1
- (16) § 25.981(a)(3) Amendment. 25-102 Fuel tank ignition prevention (documented in ELOS Memo TD0764IB-T-P-1)

h. Optional requirements elected:

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

Note: 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 A330-223 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.

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 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.

Production Basis:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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.
 - EAL 415.1338/02 Issue 1, dated November 6, 2002 for the A330-201
 - AI/EA-N 415.0531/98 Issue 3, dated May 25, 1998 for the A330-202
 - AI/EAL 415.1988/01 Issue 2, dated August 5, 2001 for the A330-203
 - AI/EA-N 415.1223/98 Issue 2, dated August 20, 1998 for the A330-223
 - AI/EA-N 415.2406/98 Issue 1, dated December 11, 1998 for the A330-243
- Equipment approved for installation is listed in the Certification Standard Equipment List
 - 00G000A0102/C0S for the A330-202.
 - 00G000A0123/C0S for the A330-223.
 - 00G000A0143/C0S for the A330-243.
- 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

Hydraulic Fluids:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Auxiliary Power Unit (APU):

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Tires:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Service Information:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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 Aircraft	Airbus Document Reference	Revision No.	Date
-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

Environmental requirements for noise:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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

Fuel:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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			
• Take-off (5 mn) ¹ (flat rated 30° C)	70,000 lbs	68,600 lbs	71,100 lbs
• maximum continuous (flat rated 25° C)	59,357 lbs	59,357 lbs	63,560 lbs
Maximum Engine Speed			
• N1 rpm (%)	3,680	3,600	3,861 (99%)
• N2 rpm (%)	10,450	10450	10,611 (100%)
Maximum Gas Temperature			
• Take-off (5mn) ¹	1,148° F (620° C)	1,148° F (620° C)	1,652° F (900° C)
• Maximum Continuous	1,112° F (600° C)	1,112° F (600° C)	1,562° F (850° C)
• Starting ²	1,148° F (620° C)	1,148° F (620° C)	1,562° F (850° C)

Maximum Oil Temperature (Supply Pump Outlet) °C • Continuous Operation • Transient (15 mn max.) • Minimum Oil Pressure (PSI)	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.		-Aeroshell Turbine Oil (Royco) 500, 555, 560 -Mobil Jet Oil II 254, 291 -Exxon Turbo Oil 2197

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.

Airspeed Limits

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Center of Gravity Limits:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Datum:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Leveling Means:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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)

Minimum Crew:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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:

Cargo Compartment	Maximum Load (kg / lb)
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: Airbus Document 00G080A0006/C2S for A330-200 and A330-200F airplanes.

Fuel Capacity:

Tank	3 Tank Airplane			
	Usable Fuel		Unusable Fuel	
	liters	gallons	liters	gallons
Wing	91,300	24,121	348	70
Center	41,560	10,980	83	21.9
Trim Tank	6,230	1,646	6	1.6
Total	139,090	36,746	437	115.5

Maximum Operating Altitude:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Control Surface Movements:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Manufacturer's Serial Numbers:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Import Requirements:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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 25-64 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.
 - Amendment 25-72 for the following 14 CFR part 25 sections:

§ 25.21	§ 25.731
§ 25.29	§ 25.733
§ 25.111	§ 25.735
§ 25.147	§ 25.772
§ 25.177	§ 25.779
§ 25.181	§ 25.783
§ 25.205	§ 25.791 Courier area
§ 25.307	§ 25.803 Courier area
§ 25.361	§ 25.810 Courier area
§ 25.373	§ 25.933
§ 25.395	§ 25.979
§ 25.397	§ 25.1093
§ 25.415	§ 25.1381
§ 25.459	§ 25.1419
§ 25.571 (b)	§ 25.1522
§ 25.613 (Vertical stabilizer only)	§ 25.1533
§ 25.615 (Vertical stabilizer only)	§ 25.1543
§ 25.625 Courier area	§ 25.1551
§ 25.693	§ 25.1581
§ 25.723	§ 25.1583
§ 25.729	§ 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

b. Special conditions

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 |

c. Equivalent safety findings

The following Equivalent safety findings 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)(b) 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).

- d. 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).

- e. 14 CFR part 34 effective September 10, 1990, including Amendment 34-1.
14 CFR part 36 effective December 1, 1969, including Amendments 36-1 through 36-28.

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

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

For precision approach and landing,

- AC 120-29
- AC 120-28C

For automatic flight control system

- AC 25.1329-1A for cruise

- h. Optional requirements elected:

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

Note: 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:

- 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).

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.

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 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.

Production Basis:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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

Hydraulic Fluids:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Auxiliary Power Unit (APU):

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Tires:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Service Information:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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

Environmental requirements for noise:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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**

Model:	Definition of Reference Airplane by Airbus Documents:
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:

Airplane Model:	Engine Model:	Engine Type Certificate:
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 is covered by MOD 201487**Fuel:**

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Engine Limits:

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
Static Thrust at Sea Level			
• Take-off (5 mn) ¹ (flat rated 30°)	64,530 lbs	66,870 lbs	68,530 lbs
• maximum continuous (flat rated 25° C)	60,400 lbs	60,400 lbs	60,400 lbs
Maximum Engine Speed			
• N1 rpm (%)	3,835 (115.5%)	3,835 (115.5%)	3,835 (115.5%)
• N2 rpm (%)	11,105 (113%)	11,105 (113%)	11,105 (113%)

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 Gas Temperature • Take-off (5mn) ¹ • Maximum Continuous • Starting ²	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 • Continuous Operation • Transient (15 mn max.) • Minimum Oil Pressure (PSI)	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	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 FAA Data Sheet E36NE	A330-323 PW 4168A-1D FAA Data Sheet E36NE	A330-323 PW 4170 FAA Data Sheet E36NE
Static Thrust at Sea Level • Take-off (5 mn) ¹ (flat rated 30°) • maximum continuous (flat rated 25° C)	64,500 lbs 55,800 lbs	68,600 lbs 59,357 lbs	68,600 lbs 59,357 lbs		70,000 lbs 59,357 lb
Maximum Engine Speed • N1 rpm (%) • N2 rpm (%)	3,600 (101%) 10,450 (103%)	3,600 (101%) 10,450 (103%)	3,600 (101%) 10,450 (103%)		3,680 (101%) 10,450 (103%)
Maximum Gas Temperature • Take-off (5mn) ¹ • Maximum Continuous • Starting ²	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)	1,148° 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)
Maximum Oil Temperature (Supply Pump Outlet) °C • Continuous Operation • Transient (15 mn max.) • Minimum Oil Pressure (PSI)	325° F (163° C) 350° F (177° C) 70 psid (482.6 KPa)	325° F (163° C) 350° F (177° C) 70 psid (482.6 KPa)	325° F (163° C) 350° F (177° C) 70 psid (482.6 KPa)		325° F (163° C) 350° F (177° C) 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) ¹ (flat rated 30°) • maximum continuous (flat rated 25° C)	67,500 lbs 60,410 lbs	71,100 lbs 63,560 lbs	71,100 lbs 63,560 lbs
Maximum Engine Speed • N1 rpm (%) • N2 rpm (%)	3,861 (99%) 10,611 (100%)	3,861 (99%) 10,611 (100%)	3,861 (99%) 10,611 (100%)
Maximum Gas Temperature • Take-off (5mn) ¹ • Maximum Continuous • Starting ²	1,652° F (900° C) 1,562° F (850° C) 1,562° F (850° C)	1,652° F (900° C) 1,562° F (850° C) 1,562° F (850° C)	1,652° F (900° C) 1,562° F (850° C) 1,562° F (850° C)
Maximum Oil Temperature (Supply Pump Outlet) °C • Continuous Operation • Transient (15 mn max.) • Minimum Oil Pressure (PSI)	374° F (160° C) 374° F (175° C) 24.0 psid	374° F (160° C) 374° F (175° C) 24.0 psid	374° F (160° C) 374° F (175° C) 24.0 psid

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
Approved oils	-Aeroshell Turbine Oil (Royco) 500, 555, 560, Mobil Jet Oil II 254, 291, Exxon Turbo Oil 2197		

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.

Center of Gravity Limits:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Datum:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Leveling Means:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Maximum Weight:

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

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

Model A330 Airplane	A330-302/-303/-323/-343	A330-302/-303/-323/-342/-343	A330-302	A330-302/-303/-323/-343
Weight Variant	050 (MOD 51805) kg / lb	052 (MOD 51807) kg / lb	053 (MOD 52924) kg / lb	054 (MOD 201648 for Production) (MOD 202218 for Retrofit) kg / lb
Maximum Take-off Weight, MTOW	230,000 / 507,063	233,000 / 513,676	205,000 / 451,947	235,000 / 518,086
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	173,000 / 381,399

Model A330 Airplane	A330-302/-303/-323/-343	A330-302/-303/-323/-342/-343	A330-323/-342/-343
Weight Variant	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	205,000/451,947	184,000/405,650
Maximum Landing Weight, MLW	187,000 / 412,264	187,000/412,264	174,000/383,604
Maximum Zero Fuel Weight, MZFW	173,000 / 381,399 to 175,000/385,808 Depending on TOW	175,000/385,808	164,000/361,558

Minimum Crew:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Number of Seats:

The maximum number of passengers approved for emergency evacuation is:
375 passengers with a 3 pair Type A and 1 pair Type 1 exit configuration, and
440 passengers with a 4 pair 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 Ref. 00G080A0006/C3S for A330-300 airplanes.

Fuel Capacity:

Model	Two Tank Airplane					
	Usable Fuel				Unusable fuel	
	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)
Wing	91,764 (73,411)	24,244 (161,871)	91,300 (73,040)	24,122 (161,053)	348 (279)	92 (615)
Trim Tank	6,121 (4,897)	1,617 (10,798)	6,230 (4,984)	1,646 (10,990)	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)

Maximum Operating Altitude:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Control Surface Movements: *(Total one-way travel in each direction of each movable control surface on the aircraft.)*

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Manufacturer's Serial Numbers:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Import Requirements:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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

- 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. 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 for the optional installation of the Lower Deck Mobile Crew Rest Compartment: (published in the Federal Register on January 6, 2005, Docket No. NM287, Special Condition No. 25-281-SC)
Lower Deck Mobile Crew Rest (LD-MCR) Compartment (optional installation)
 3. Special conditions issued for Seats With Inflatable Lap Belts, published in the Federal Register November 03, 2009, Docket No. NM-418, Special Conditions No. 25-395-SC
 4. Special conditions issued for Seats with Non-Traditional, Large, Non-Metallic Panels, published in the Federal Register January 4, 2010, Docket No. NM-424, Special Conditions No. 25-400-SC
- d. 14 CFR part 34, effective September 10, 1990.
- e. 14 CFR part 36 as amended by Amendments 36-1 through 36-20.
- 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 have been made in accordance with § 21.21(b)(1) for the following sections:
- (1) § 25.335(d) for design airspeeds
 - (2) § 25.345 for high lift devices
 - (3) § 25.349 for control surface loads
 - (4) § 25.351(b) for unsymmetrical loads
 - (5) § 25.371 for gyroscopic loads
 - (6) § 25.373 for speed control devices
 - (7) §§ 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
 - (8) §§ 25.933(a)(1)(ii), 25.1309(b)(1) for flight critical thrust reverser
 - (9) § 25.1203(d) for turbine overheat detection (RR Trent 700 powered A330-341, -342, -343 only)
 - (10) § 25.1305(c)(6) Warning means for engine fuel filter contamination (RR Trent 700 powered A330-341, -342 and -343 only)
 - (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).

- h. Optional requirements elected:
- § 25.801 for ditching.
 - § 25.1419 for icing.

Note: 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. 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.

The Direction Generale de 'Aviation Civile (DGAC) of France originally type certificated the Airbus Model A330-300 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 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.

Production Basis:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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

Hydraulic Fluid:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Auxiliary Power Unit (APU):

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Tires:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

Service Information:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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.

Aircraft Model A330	Airbus Document Reference.	Revision No.	Date
-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

Environmental requirements for noise:

See Section IV, Data pertinent to All Model A330-200, A330-200 Freighter and A330-300 Series airplanes.

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

Aircraft	Nomenclature	Specification		
		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	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, V_{MO}/M_{MO} 330 KIAS / .86
- Design Diving Speed, V_D 365 KIAS / .93
- Design Maneuvering Speed, V_A Refer to AFM Performance Section

• Maximum Flaps/Slats Extended Speed or Operating Speed, V_{FE}

Configuration	Slats/Flaps/Ailerons °	V_{FE} (kt)	
1	16/0/0	240	Intermediate Approach
	16/8/0	215	Take-off
1 + F	16/8/5	205	Take-off
2	20/14/10	196	Take-off and Approach
3	23/22/10	186	Take-off, Approach, and Landing
FULL	23/32	180	Landing

• Minimum Control Speed, V_{MC} Refer to AFM performance Section.
(Performance Engineering Program/OCTOPUS)

Landing Gear Speeds:

- Maximum Speed with Landing Gear Operating (Extension and Retraction) V_{LO} 250 KIAS / .55M
- Maximum Speed with Landing Gear Locked Down, V_{LE} 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
Aileron	+25 /- 25°
#1 Spoilers	Speed Brake 23°
	Lift Dumper 35°
#2,3 Spoilers	Roll 35°
	Speed Brake 30°
#4,5,6 Spoilers	Lift Dumper 50°
	Roll 35°
Aileron Droop	Speed Brake 30°
	Lift Dumper 50°
Flaps	10°
Slats	32°
Stabilizers	23°
Elevator	+2°/-14°
Rudder	+15°/-30°
	+30°/-30°

Environmental requirements for noise:

A330-200

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.

A330-300

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.

A330-200 Freighter

A330-223F fitted with PW4170 engines and A330-243F fitted with RR Trent 772B/772C engines, are compliant with Stage IV noise requirements of 14 CFR part 36 as amended by 36-1 through 36-28.

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 Aviation Safety Agency (EASA), or a French "Certificat de Navigabilite pour Exportation" signed by a representative of the Direction Generale de 'Aviation Civile (DGAC) of France on behalf of the European Community. The Export C of A should contain the following statement (in the English language): "The aircraft covered by this certificate has been examined, tested, and found to conform to the Type Design approved under FAA Type Certificate No. A46NM as defined in TCDS A46NM revision 4 (or later revision) and to be in condition for safe operation."

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. 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.

FAA Required Modification List for Airbus Model A330 Aircraft:

Prior to issuance of a Standard Airworthiness Certificate on any Airbus A330 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. Prior to issuance of a Standard Airworthiness Certificate on any Airbus A330 model aircraft, the following note must be placed on the Airworthiness Certificate:

"CONTINUED AIRWORTHINESS: Type Certificate Data Sheet (TCDS) A46NM, Revision 4, dated March 21, 2000, contains the "FAA Required Modification List (RML)" that must be complied with for this aircraft to remain in a condition for safe operation.

The RML is part of the permanent record for this aircraft; it must remain with the aircraft data and continue to be complied with in the event of transfer to another operator."

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. 14 CFR 21.183(c) and (d) provide that 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." 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 design are currently operating in the U.S. was published in the Federal Register on May 11, 1998

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, International Branch, ANM-116, FAA Transport Airplane Directorate; 1601 Lind Avenue Southwest; Renton, Washington 98055; telephone (425) 227-1263; fax (425) 227-1149. Operators shall submit their request through an appropriate FAA Principle Maintenance Inspector, who may add comments and then send it to the Manager, International 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. AI/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

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

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)	[42351 AND 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
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:

Type IV - Specification NSA 30.7110

Auxiliary Power Unit (APU):

Garrett Airesearch	GTCP 331-350C (Specification 31-7677A)
Maximum Allowable Speed	(107%) 41,730 RPM
Maximum Gas Temperature:	
Turbine Outlet Temperature	650 °C
Starting	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 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 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.

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 and 00G080A0006/C3S for A330-300 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 programme for the aircraft:
 - A330 Maintenance Review Board Report (Certification Document 00G050A0002/C01) 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.
 - Instructions and airworthiness limitations applicable to Damage Tolerant Airworthiness Limitation Items (DT ALI) are provided in the A330 Airworthiness Limitations Section (ALS) Part 2.
 - Certification Maintenance Requirements (CMR's) are provided in the A330 Airworthiness Limitations Section (ALS) Part 3.
 - Instructions and airworthiness limitations applicable to Aging Systems Maintenance (ASM) are provided in the A330 Airworthiness Limitations Section (ALS) Part 4.
 - Fuel Airworthiness Limitations (FAL) are provided in the A330 Airworthiness Limitations Section (ALS) Part 5.
- Note :** 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,-223, -223F, -243, -243F, -302, -303, -323, -341, -342 and -343: 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.
- 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 Issue 1 is embodied, only one HF remains available on the aircraft instead of two as defined in the applicable Type design definition.

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