

European Aviation Safety Agency

EASA TYPE-CERTIFICATE DATA SHEET

EASA.A.015

AIRBUS A340

AIRBUS
1 Rond-point Maurice Bellonte
31707 Blagnac
France

For models:	A340-211	A340-311	A340-541	A340-643
	A340-212	A340-312	A340-542	
	A340-213	A340-313	A340-642	

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SECTION 1: GENERAL (ALL MODELS)

1. Data Sheet No: A.015
2. Airworthiness Category: Large Aeroplanes
3. Performance Category: A
4. Certifying Authority: EASA
5. Type Certificate Holder: AIRBUS
1 Rond-point Maurice Bellonte
31707 Blagnac, France
6. LROPS:
To be completed at a later stage.

SECTION 2: A340-200 SERIES

I. General

1. Aeroplane: Airbus A340-200

II. Certification Basis

1. Reference Application Date for EASA Certification: 15 June 1988
2. EASA Certification Date (JAA recommendation):
(DGAC-F TC 183 remains a valid reference for models certified before 28 September 2003)

A340-211: 22 December 1992
A340-212: 14 March 1994
A340-213: 19 December 1995

3. EASA Certification Basis:

JAR 25 Change 13 effective on October 5, 1989 with the following exceptions:

Deviation on limited areas for compliance against paragraphs 25.561 and 25.562 such as:

- Compliance at change 12 for wing tank outside the fuselage contour
- For showing compliance with JAR 25.785 (a)(b)(c), the front row seats located behind a bulkhead are not tested according to JAR 25.562(c)(5)(6). Instead, a minimum 35 inches distance between the seats and the bulkhead is considered an acceptable alternative.

JAR AWO Change 1

NPA JAR AWO-3 (Take-off in low visibility)

OP 91/1 for discrete gust

4. Special Conditions:

SC G-5 Resistance to fire terminology (NPA 25D-181)
SC G-7 Function and reliability testing
SC A-1 Discrete gust requirements (NPA 25C-205)
SC A-2 Interaction of systems and structure (NPA 25C-199)
SC A-3 Design manoeuvre requirements
SC A-4 Design dive speed
SC A-5 Limit pilot forces and torque
SC A-7 Stalling speeds for structural design
SC A-11 Aeroelastic stability requirements (NPA 25B, C, D-236)
SC F-1 Stalling and scheduled operating speeds
SC F-2 Motion and effects of cockpit controls
SC F-3 Static longitudinal stability
SC F-4 Static directional and lateral stability
SC F-5 Flight envelope protections
SC F-6 Normal load factor limiting system
SC S-3 Landing gear warning (NPA 25D-162)
SC S-6 Lightning protection indirect effects
SC S-10 Effects of external radiations upon aircraft systems

- SC S-13 Autothrust system
- SC S-16 Control signal integrity
- SC S-18 Electronic flight controls
- SC S-20 Emergency electrical power (NPA 25D, F-179)
- SC S-23 Electrical wiring and miscellaneous electrical requirements (NPA 25D, F-191)
- SC S-24 Doors (NPA 25D, F-251)
- SC S-38 Towbarless towing
- SC P-1 FADEC
- SC P-2 Trim tank
- SC E-2 Crew rest
- SC E-5.1 Lower deck Lavatory (applicable from August 2000)
- SC E-8.1 Lower deck stowage area (applicable from August 2000)
- SC E-11 Bulk crew rest compartment (applicable from January 2002)
- SC E-19 F/C sliding screens (applicable from September 2003)
- SC H-01 Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS (applicable from May 2010)

5. Equivalent Safety Findings:

- SC F-8 (or F-8.1) and SC S-21 have been found to provide an equivalent safety level to JAR 25 accelerate-stop and brakes qualification requirements (NPA 25 B, D, G 244)
- CRI S-45 provides an equivalent level of safety to JAR 25.1549(a)
- CRI S-48 provides an equivalent level of safety to JAR AWO 313
- CRI P-9 provides an equivalent level of safety to JAR 25.1203(d)
- CRI E-15 provides an equivalent level of safety to JAR 25.772 (applicable from July 2002)
- CRI E-17 provides an equivalent level of safety to JAR 25.819(g)(2)(3) (applicable from November 2003)
- CRI E-18 provides an equivalent level of safety to JAR 25.819(f) (applicable from November 2003)

6. Environmental Standards:

- Environmental requirements for noise, fuel venting and emissions:
 - ICAO Annex 16 Volume 1 - Part II - Chapter 4 for Noise. The compliance of this chapter has been originally demonstrated through MOD 55005, not mandatory anymore.
 - ICAO Annex 16 Volume 2 - Part II for Fuel Venting
 - ICAO Annex 16 Volume 2 - Part III - Chapter 2 for Emissions

7. A340-213 Weight Variant 021 only:

7.1 Special Condition / Equivalent Safety Finding:

The following requirements are in addition of Special Conditions / ESF identified in paragraphs 4/5 above:

- SC F-8.1 is applicable instead of SC F-8.
- ESF S-148 (JAR NPA AWO-8) replaces S-48.

III. Technical Characteristics and Operational Limitations

Four turbo-fan, long range, twin-aisle, large category airplane.

1. A340-200 powered by CFMI engines

1.1 Type Design Definition:

A340-211: 00F000A0211/C00
A340-212: 00F000A0212/C00
A340-213: 00F000A0213/C00

1.2 Engines:

A340-211: Four (4) CFM56-5C2 or CFM56-5C2/4 or CFM56-5C2/F or CFM56-5C2/F4 or CFM56-5C2/G or CFM56-5C2/G4 or CFM56-5C2/P turbofan engines

A340-212: Four (4) CFM56-5C3/F or CFM56-5C3/F4 or CFM56-5C3/G or CFM56-5C3/G4 or CFM56-5C3/P turbofan engines

A340-213: Four (4) CFM56-5C4 or CFM56-5C4/1 or CFM56-5C4/P or CFM56-5C4/1P turbofan engines

1.2.1 Engine Limits:

Engine Limits Data Sheet E37NE (FAA) E.003 (EASA)	A340-211 CFM56-5C2 CFM56-5C2/4 CFM56-5C2/F CFM56-5C2/F4 CFM56-5C2/G CFM56-5C2/G4 CFM56-5C2/P	A340-212 CFM56-5C3/F CFM56-5C3/F4 CFM56-5C3/G CFM56-5C3/G4 CFM56-5C3/P	A340-213 CFM56-5C4 CFM56-5C4/1 CFM56-5C4/P CFM56-5C4/1P
Static thrust at sea level: - take-off (5mn)* (flat rated 30°C)	13,878 daN	14,456 daN	15,124 daN
- maximum continuous	12,588 daN	13,078 daN	13,371 daN
Approved oils: see CFMI engine Service Bulletin N°7 9-001, latest revision			

* 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go-around) in accordance with EASA TCDS paragraph VI-1.

Other engine limitations: See the relevant Engine Type Certificate Data Sheet.

1.3 Fuel

NOMENCLATURE	SPECIFICATION		
	FRANCE	U.S.A.	U.K.
KEROSENE	AIR 3405	ASTM D 1655 (JET A) (JET A1)	DERD 2494/2453
WIDE CUT	91056 (72845)	ASTM D 1655 (JET B)	DERD 2454/2486
	AIR 3407B	ML-T 5624 (JP4)	DERD 2454/2486

Additives: See CFMI "Specific Operating Instructions", installation manual.
The above-mentioned fuels and additives are also suitable for the APU.

1.4 Limit Speeds:
Refer to approved Airplane Flight Manual.

1.5 Centre of Gravity Range:
Refer to approved Airplane Flight Manual.

1.6 Maximum Certified Weights:

Valid for A340-211 and A330-212 and A340-213

Variant	000 Basic	001 (41302)	002 (44229)
MTOW (T)	253.5	257	260
MLW (T)	181	181	181
MZFW (T)	169	169	169

Valid for A340-213 Weight Variant 020

Variant	021 (44281)
MTOW (T)	275
MLW (T)	185
MZFW (T)	173

1.7 Notes

Conversion of A340-211 into A340-212:

A340-211 aircraft can be converted into A340-212 by application of Airbus Service Bulletin A340-00-4029 (Mod 50472 – conversion of CFM56-5C2/F into CFM56-5C3/F).

A340-211 (CFM56-5C2/F or CFM56-5C2/F4 engines) - A340-212 (CFM56-5C3/F or CFM56-5C3/F4 engines)

The maximum permissible gas temperature at take-off and max continuous is extended to 965°C and 930°C respectively. However, the ECAM indication remains at 950°C and 915°C.

A340-211 (CFM56-5C2/G or CFM56-5C2/G4 or CFM56-5C2/P engines) - A340-212 (CFM 56-5C3/G or CFM56-5C3/G4 or CFM56-5C3/P engines) - A340-213 (CFM 56-5C4 or CFM56-5C4/P or CFM56-5C4/1P engines)

The maximum permissible gas temperature at take-off and maximum continuous extended to 975°C and 940°C respectively, however the ECAM indications remain at 950°C and 915°C.

A340-211 (Mod. 42680 or Mod. 43092 or Mod 44752 or Mod 51296)

CFM56-5C2, CFM56-5C2/4, CFM56-5C2/F, CFM56-5C2/F4, CFM56-5C2/G, CFM56-5C2/G4, CFM56-5C2/P engine can be intermixed on the same aircraft whatever the number and the position.

A340-212 (Mod. 43574 or Mod 44752 or Mod 51296)
CFM56-5C3/F, CFM56-5C3/F4, CFM56-5C3/G, CFM56-5C3/G4, CFM56-5C3/P engine can be intermixed on the same aircraft whatever the number or the position.

A340-213 (Mod. 51296)
CFM56-5C4, CFM56-5C4/P, engines can be intermixed on the same aircraft whatever the number or the position.

A340-213 (Mod 44260)
When CFM56-5C4/1 engines are installed, the thrust bump can be activated by Mod 44260.

A340-213 (Mod 45912/45913)
A340-213 can be fitted with CFM56-5C2 engines by application of Airbus Industrie Service Bulletin 00-4016 (mod 45912) and revert to CFM56-5C4 engines installation by Airbus Industrie Service Bulletin 00-4017 (mod 45913).

2. Data pertinent to all A340-200 series

2.1 Fuel quantity (0.8 kg/liter):

2.1.1 A340-211, A340-212, A340-213

TANK	3-TANK AIRPLANE					
	Usable fuel liters (kg)		Usable fuel liters (kg) (Mod. 46761)		Unusable fuel liters (kg)	
WING	91,056	(72,845)	91,056	(72,845)	245	(196)
CENTER	41,468	(33,174)	41,468	(33,174)	83	(66)
TRIM TANK	6,114	(4,891)	6,230	(4,984)	6	(5)
TOTAL	138,638	(110,910)	138,754	(111,003)	334	(267)

2.1.2 A340-213 Weight Variant 021 and on

TANK	3-TANK AIRPLANE		3-TANK AIRPLANE WITH OPTIONAL ACTs (mod 44002, 44005)	
	Usable fuel liters (kg)	Unusable fuel liters (kg)	Usable fuel liters (kg)	Unusable fuel liters (kg)
WING	92,850 (74,280)	245 (196)	92,850 (74,280)	245 (196)
CENTER	41,468 (33,174)	83 (66)	41,468 (33,174)	83 (66)
TRIM TANK	6,230 (4,984)	6 (5)	6,230 (4,984)	6 (5)
1 ACT in cargo hold			7,200 (5,760)	28 (22)
2 ACTs in cargo hold			14,400 (11,520)	56 (44)
TOTAL	140,548 (112,438)	334 (267)		
1 ACT in cargo hold			147,748 (118,198)	362 (290)
2 ACTs in cargo hold			154,948 (123,958)	390 (312)

2.2 Minimum Flight Crew:

Two (2): Pilot and Co-pilot

2.3 Maximum Seating Capacity

The maximum number of passengers approved for emergency evacuation is:

- 375 basic,
- 420 when 4 Type A doors installed (mod 40161).

See interior layout drawing for the maximum passenger capacities approved for each aeroplane when delivered.

2.4 Cargo compartment loading

Cargo compartment	Maximum load (kg)
Forward	18,507
Aft	15,241
Rear (bulk)	3,468

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

- 00F080A0002/C2S for A340-211/-212
- 00F080A0004/C0S for A340-213

2.5 Environmental Flight Envelope:
Refer to approved Airplane Flight Manual.

2.6 Other Limitations:
Refer to approved Airplane Flight Manual.

2.7 Auxiliary Power Unit (APU):
One GARRETT AIRESEARCH GTCP 331-350C (Specification 31-7677A)
Oils: refer to applicable approved Manuals

2.8 Equipment:
The equipment required by the applicable requirements shall be installed.
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

2.9 All Weather Capabilities:

A340-211:

- If modification 41549 is embodied the aircraft is qualified to Cat 2 precision approach
- If modification 42100 is embodied the aircraft is qualified to Cat 3 precision approach and autoland

A340-212:

- If modification 42100 is embodied the aircraft is qualified to Cat 3 precision approach and autoland.

A340-213:

- Modification 43640 is part of the Type Design and qualifies to Cat 3 precision approach and autoland.

2.10 Wheels and Tyres:

Refer to Airbus Service Bulletin A340-32-4007.

2.11 Hydraulics:

Fluid specifications: TYPE IV (NSA 307-110).

2.12 Maintenance Instructions and Airworthiness Limitations:

- Limitations applicable to Safe Life Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) sub parts 1-2 and 1-3 approved by EASA;
- Limitations applicable to Damage-Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) part 2 approved by EASA;
- Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA;
- Limitations applicable to Ageing System Maintenance are provided in the A340 Airworthiness Limitation Section (ALS) Part 4 approved by EASA;
- Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5 approved by EASA;
- Maintenance Review Board Report.

SECTION 3: A340-300 SERIES

I. General

1. Aeroplane: Airbus A340-300

II. Certification Basis

1. Reference Application Date for EASA Certification: 15 June 1998
2. EASA Certification Date (JAA recommendation):
(DGAC-F TC 183 remains a valid reference for models certified before 28 September 2003)

A340-311: 22 December 1992
A340-312: 14 March 1994
A340-313: 16 March 1995

3. EASA Certification Basis:

JAR 25 Change 13 effective on October 5, 1989 with the following exceptions:
Deviation on limited areas for compliance against paragraphs 25.561 and 25.562 such as:

- Compliance at change 12 for wing tank outside the fuselage contour
- For showing compliance with JAR 25.785 (a)(b)(c), the front row seats located behind a bulkhead are not tested according to JAR 25.562(c)(5)(6). Instead, a minimum 35 inches distance between the seats and the bulkhead is considered an acceptable alternative

JAR AWO Change 1
NPA JAR AWO-3 (Take-off in low visibility)
OP 91/1 for discrete gust

4. Special Conditions:

SC G-5	Resistance to fire terminology (NPA 25D-181)
SC G-7	Function and reliability testing
SC A-1	Discrete gust requirements (NPA 25C-205)
SC A-2	Interaction of systems and structure (NPA 25C-199)
SC A-3	Design manoeuvre requirements
SC A-4	Design dive speed
SC A-5	Limit pilot forces and torque
SC A-7	Stalling speeds for structural design
SC A-11	Aeroelastic stability requirements (NPA 25B, C, D-236)
SC F-1	Stalling and scheduled operating speeds
SC F-2	Motion and effects of cockpit controls
SC F-3	Static longitudinal stability
SC F-4	Static directional and lateral stability
SC F-5	Flight envelope protections
SC F-6	Normal load factor limiting system
SC S-3	Landing gear warning (NPA 25D-162)
SC S-6	Lightning protection indirect effects
SC S-10	Effects of external radiations upon aircraft systems
SC S-13	Autothrust system
SC S-16	Control signal integrity

SC S-18	Electronic flight controls
SC S-20	Emergency electrical power (NPA 25D, F-179)
SC S-23	Electrical wiring and miscellaneous electrical requirements (NPA 25D, F-191)
SC S-24	Doors (NPA 25D, F-251)
SC S-38	Towbarless towing
SC P-1	FADEC
SC P-2	Trim tank
SC E-2	Crew rest
SC E-5.1	Lower deck Lavatory (applicable from August 2000)
SC E-8.1	Lower deck stowage area (applicable from August 2000)
SC E-11	Bulk crew rest compartment (applicable from January 2002)
SC E-19	F/C sliding screens (applicable from September 2003)
SC H-01	Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS (applicable from May 2010)

5. Equivalent Safety Findings:

SC F-8 (or F-8.1) and SC S-21 have been found to provide an equivalent safety level to JAR 25 accelerate-stop and brakes qualification requirements (NPA 25 B, D, G 244)
CRI S-45 provides an equivalent level of safety to JAR 25.1549(a)
CRI S-48 provides an equivalent level of safety to JAR AWO 313
CRI P-9 provides an equivalent level of safety to JAR 25.1203(d)
CRI E-15 provides an equivalent level of safety to JAR 25.772 (applicable from July 2002)
CRI E-17 provides an equivalent level of safety to JAR 25.819(g)(2)(3) (applicable from November 2003)
CRI E-18 provides an equivalent level of safety to JAR 25.819(f) (applicable from November 2003)

6. Environmental Standards:

Environmental requirements for noise, fuel venting and emissions:
ICAO Annex 16 Volume 1 - Part II - Chapter 4 for Noise. The compliance of this chapter has been originally demonstrated through MOD 55005, not mandatory anymore.
ICAO Annex 16 Volume 2 - Part II for Fuel Venting
ICAO Annex 16 Volume 2 - Part III - Chapter 2 for Emissions

7. A340-313 Weight Variants 020, 021, 024, 026, 027 and 28 only:

7.1 Special Condition / Equivalent Safety Finding:

The following requirements are in addition of Special Conditions / ESF identified in paragraphs 4/5 above:

- SC F-8.1 is applicable instead of SC F-8
- ESF S-148 (JAR NPA AWO-8) replaces S-48

III. Technical Characteristics and Operational Limitations

Four turbo-fan, long range, twin-aisle, large category airplane.

1. A340-300 powered by CFMI engines:

1.1 Type Design Definition:

A340-311: 00F000A0311/C00

A340-312: 00F000A0312/C00

A340-313: 00F000A0313/C00

1.2 Engines:

A340-311: Four (4) CFM56-5C2 or CFM56-5C2/4 or CFM56-5C2/F or CFM56-5C2/F4 or CFM56-5C2/G or CFM56-5C2/G4 or CFM56-5C2/P turbofan engines

A340-312: Four (4) CFM56-5C3/F or CFM56-5C3/F4 or CFM56-5C3/G or CFM56-5C3/G4 or CFM56-5C3/P turbofan engines

A340-313: Four (4) CFM56-5C4 or CFM56-5C4/1 or CFM56-5C4/P or CFM56-5C4/1P turbofan engines

1.2.1 Engine Limits:

Engine Limits Data Sheet E37NE (FAA) E.003 (EASA)	A340-311 CFM56-5C2 CFM56-5C2/4 CFM56-5C2/F CFM56-5C2/F4 CFM56-5C2/G CFM56-5C2/G4 CFM56-5C2/P	A340-312 CFM56-5C3/F CFM56-5C3/F4 CFM56-5C3/G CFM56-5C3/G4 CFM56-5C3/P	A340-313 CFM56-5C4 CFM56-5C4/1 CFM56-5C4/P CFM56-5C4/1P
Static thrust at sea level: - take-off (5mn)* (flat rated 30°C) - maximum continuous	13,878 daN 12,588 daN	14,456 daN 13,078 daN	15,124 daN 13,371 daN
Approved oils: see CFMI engine Service Bulletin N° 9-001, latest revision			

* 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go-around) in accordance with EASA TCDS paragraph VI-1

Other engine limitations: See the relevant Engine Type Certificate Data Sheet.

1.3 Fuel:

NOMENCLATURE	SPECIFICATION		
	FRANCE	U.S.A.	U.K.
KEROSENE	AIR 3405	ASTM D 1655 (JET A) (JET A1)	DERD 2494/2453
WIDE CUT	91056 (72845)	ASTM D 1655 (JET B)	DERD 2454/2486
	AIR 3407B	ML-T 5624 (JP4)	DERD 2454/2486

Additives: See CFMI "Specific Operating Instructions", installation manual.
The above-mentioned fuels and additives are also suitable for the APU.

1.4 Limit Speeds:

Refer to approved Airplane Flight Manual.

1.5 Centre of Gravity Range:

Refer to approved Airplane Flight Manual.

1.6 Maximum Certified Weights:

Valid for A340-311 and A340-312 and A340-313

Variant	000 Basic	001 (41302)	002 (44228)	003 (44102)	004 (44230)
MTOW (T)	253.5	257	260	257	260
MLW (T)	186	186	186	188	188
MZFW (T)	174	174	174	178	178

Valid for A340-313 only

Variant	020 (43500)	021 (44135)	023 (44625)	024 (45738)	025 (44791)	026 (46613)	027 (46650)	028 (49529)
MTOW (T)	271	275	262	275	260	275	271	276.5
MLW (T)	190	190	190	192	190	192	192	190
MZFW (T)	178	178	178	180	178	181	178	178

Variant	050 (51808)	051 (51809)	052 (51810)	053 (55566)	054 (55677)
MTOW (T)	275	275	276.5	276.5	275
MLW (T)	192	192	192	192	192
MZFW (T)	180	181	181	183	183

Valid for A340-312 only

Variant	029 (53243)
MTOW (T)	260
MLW (T)	188
MZFW (T)	178

1.7 Notes

Conversion of A340-311 into A340-312:
A340-311 aircraft can be converted into A340-312 by application of Airbus Service Bulletin A340-00-4014 (Mod 45247).

Conversion of A340-312 into A340-311:

A340-312 aircraft can be converted into A340-311 by application of Airbus Service Bulletins:

- A340-00-4028 (Mod 47596 – Conversion of CFM56-5C3/F into CFM56-5C2).
- A340-00-4026 (Mod 47427 – Conversion of CFM56-5C3/F into CFM56-5C2/F).

Conversion of A340-313 into A340-312:

A340-313 aircraft can be converted into A340-312 by application of Airbus Service Bulletins:

- SB A340-00-4035 (Mod 53452)

A340-313 WV 027 Short Range Variant

The A340-313 WV 027 aircraft can be operated as short range variant and have their new design service goal increased to 30000 cycles respectively 60000 FH providing the following condition is fulfilled:

“These aircraft are maintained according to the specific temporary inspection program as per letter AI/SE-M 95A.1372/98 and the revised MRB for SSIs’ quoted post modification 46651“

A340-311 (CFM56-5C2/F or CFM56-5C2/F4 engines) - A340-312 (CFM56-5C3/F or CFM56-5C3/F4 engines)

The maximum permissible gas temperature at take-off and max continuous is extended to 965°C and 930°C respectively. However, the ECAM indication remains at 950°C and 915°C.

A340-311 (CFM56-5C2/G or CFM56-5C2/G4 or CFM56-5C2/P engines) - A340-312 (CFM 56-5C3/G or CFM56-5C3/G4 or CFM56-5C3/P engines) - A340-313 (CFM 56-5C4 or CFM56-5C4/P or CFM56-5C4/1P engines)

The maximum permissible gas temperature at take-off and maximum continuous extended to 975°C and 940°C respectively, however the ECAM indications remain at 950°C and 915°C.

A340-311 (Mod. 42680 or Mod. 43092 or Mod 44752 or Mod 51296)

CFM56-5C2, CFM56-5C2/4, CFM56-5C2/F, CFM56-5C2/F4, CFM56-5C2/G, CFM56-5C2/G4, CFM56-5C2/P engine can be intermixed on the same aircraft whatever the number and the position.

A340-312 (Mod. 43574 or Mod 44752 or Mod 51296)

CFM56-5C3/F, CFM56-5C3/F4, CFM56-5C3/G, CFM56-5C3/G4, CFM56-5C3/P engine can be intermixed on the same aircraft whatever the number or the position.

A340-313 (Mod. 51296)

CFM56-5C4, CFM56-5C4/P, engine can be intermixed on the same aircraft whatever the number or the position.

A340-313 (Mod 44260)

When CFM56-5C4/1 engines are installed, the thrust bump can be activated by Mod 44260

A340-313 (Mod 45912/45913)

A340-313 can be fitted with CFM56-5C2 engines by application of Airbus Industrie Service Bulletin 00-4016 (mod 45912) and revert to CFM56-5C4 engines installation by Airbus Industrie Service Bulletin 00-4017 (mod 45913).

2. Data pertinent to all A340-300 series

2.1 Fuel quantity (0.8 kg/liter) :

2.1.1 A340-311, A340-312 (except for Weight Variant 029: see § 2.1.2) and A340-313 without mod 49428 and without mod 200118

TANK	3-TANK AIRPLANE	
	Usable fuel liters (kg)	Unusable fuel liters (kg)
WING	91,056 (72,845)	245 (196)
CENTER	41,468 (33,174)	83 (66)
TRIM TANK	6,114 (4,891)	6 (5)
TOTAL	138,638 (110,910)	334 (267)

2.1.2 A340-313 Weight Variant 020 without mod 49428 and without mod 200118 and A340-312 Weight Variant 029

TANK	3-TANK AIRPLANE		3 TANK AIRPLANE WITH OPTIONAL ACTs (mod 42612)	
	Usable fuel liters (kg)	Unusable fuel liters (kg)	Usable fuel liters (kg)	Unusable fuel liters (kg)
WING	92,850 (74,280)	245 (196)	92,850 (74,280)	245 (196)
CENTER	42,420 (33,936)	83 (66)	42,420 (33,936)	83 (66)
TRIM TANK	6,230 (4,984)	6 (5)	6,230 (4,984)	6 (5)
1 ACT in cargo hold			7,200 (5,760)	28 (22)
TOTAL	141,500 (113,200)	334 (267)	148,700 (118,960)	362 (290)

2.1.3 A340-313 Weight Variant 020 with mod 49428 or with mod 200118

TANK	3-TANK AIRPLANE	
	Usable fuel liters (kg)	Unusable fuel liters (kg)
WING	92,850 (74,280)	245 (196)
CENTER	41,560 (33,248)	83 (66)
TRIM TANK	6,230 (4,984)	6 (5)
TOTAL	140,640 (112,512)	334 (267)

2.2 Minimum Flight Crew:
Two (2): Pilot and Co-pilot

2.3 Maximum Seating Capacity
The maximum number of passengers approved for emergency evacuation is:
– 375 basic,
– 440 when 4 Type A doors installed (mod 40161).

See interior layout drawing for the maximum passenger capacities approved for each aeroplane when delivered.

2.4 Cargo compartment loading

Cargo compartment	Maximum load (kg)
Forward	22861
Aft	18507
Rear (bulk)	3468

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

- 00F080A0001/C3S for A340-311/-312
- 00F080A0004/C0S for A340-313

2.5 Environmental Flight Envelope
Refer to approved Airplane Flight Manual.

2.6 Other Limitations
Refer to approved Airplane Flight Manual.

2.7 Auxiliary Power Unit (APU)

One GARRETT AIRESEARCH GTCP 331-350C (Specification 31-7677A)

Oils: refer to applicable approved Manuals

2.8 Equipment

The equipment required by the applicable requirements shall be installed. 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

2.9 All Weather Capabilities

A340-311:

- If modification 41549 is embodied the aircraft is qualified to Cat 2 precision approach
- If modification 42100 is embodied the aircraft is qualified to Cat 3 precision approach and autoland

A340-312:

- If modification 42100 is embodied the aircraft is qualified to Cat 3 precision approach and autoland.

A340-313:

- Modification 43640 is part of the Type Design and qualifies to Cat 3 precision approach and autoland.

2.10 Wheels and Tyres

Refer to Airbus Service Bulletin A340-32-4007.

2.11 Hydraulics

Fluid specifications: TYPE IV (NSA 307-110).

2.12 Maintenance Instructions and Airworthiness Limitations

- Limitations applicable to Safe Life Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) sub parts 1-2 and 1-3 approved by EASA;
- Limitations applicable to Damage-Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) part 2 approved by EASA;
- Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA;
- Limitations applicable to Ageing System Maintenance are provided in the A340 Airworthiness Limitation Section (ALS) Part 4 approved by EASA;
- Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5;
- Maintenance Review Board Report.

SECTION 4: A340-600 SERIES

I. General

1. Aeroplane: Airbus A340-600

II. Certification Basis

1. Reference Application Date for EASA Certification: 31 December 1997
2. EASA Certification Date (JAA recommendation):
(DGAC-F TC 183 remains a valid reference for models certified before 28 September 2003)

A340-642: 21 May 2002

A340-643 11 April 2006

3. EASA Certification Basis:

JAR 25 Change 14 plus Orange Paper 96/1

– Except JAR 25.365(g) which remains at Change 13 for the design of the cockpit wall.

JAR AWO Change 2

4. Special Conditions:

SC F-1001	Stalling and scheduled operating speeds
SC F-2	Motion and effect of cockpit controls
SC F-1003	Static longitudinal stability
SC F-4	Static directional and lateral stability
SC F-5	Flight envelope protection
SC F-6	Normal load factor limiting system
SC A-1002	Interaction of systems and structure
SC A-1003	Design Maneuver Requirements
SC A-1004	Design Dive Speed
SC A-5	Limit pilot forces and torque
SC A-1006	Grounds Loads and Conditions for Central Landing Gear
SC P-1018	Engine Sustained imbalance
SC S-10.2	Effects of external radiation upon aircraft systems
SC S-1013	Autothrust System
SC S-16	Control Signal Authority
SC S-18	Electrical Flight Control unusual features
SC S-38	Towbarless Towing
SC E-2	Under floor crew rest compartment (option)
SC E-5.1	Lower deck lavatories (option)
SC E-8.1	Lower deck stowage compartment (option)
SC E-11	Bulk Crew Rest Compartment (option)
SC E-1014	HIC Compliance to Front Row Seating
SC E-19	F/C sliding screens (applicable from September 2003)
SC O-1001	Ferrying one engine unserviceable
SC G-7	Function and Reliability Testing
SC H-01	Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS (applicable from May 2010)

5. Exemption (temporary):

P-1024 ECAM EGT indication (cancelled by modification 50560)

6. Equivalent safety findings

SC F-1008	Accelerate-stop distance (NPA 25BDG244)
SC F-1014	Flap Gates (NPA 25B238)
SC A-1001	Revised Loads Requirements (NPA 25C20 and NPA 25C282)
SC A-1011	Vibration, Buffet and Aeroelastic Requirements (NPA 25BCD236)
SC A-1015	Checked Pitching Maneuver Loads
SC A-1017	Braked Roll Conditions (NPA 25C-276)
SC A-1020	Shock Absorption test (NPA 25D-279)
SC A-1021	Engine Failure Loads
SC A-1023	Continuous Turbulence
SC A-1024	Casting Factors
SC A-1026	Proof of structure
SC S-1021	Brakes (partial NPA 25D-291)
SC S-45	Oil Indication
SC S-148	Longitudinal touch down performance and MABH deletion (NPA AWO 8)
SC S-1059	Hydraulics System
SC S-1070	AFM – Runway Visual Range Limits
SC P-1008	Fuel Tank Access Covers
SC P-1020	APU Instruments (NPA 25J246)
SC P-1021	Windmilling without oil (NPA 25E268)
SC P-1022	Falling and Blowing Snow (NPA 25E288)
ESF P-1009	Rolls-Royce Trent 500 Turbine Overheat Detection
ESF P-1011	Thrust Reverser Testing
ESF S-1065	Packs Off Operation
ESF S-1066	Excess deviation alert
ESF E-15	Reinforced Security Cockpit Door
ESF E-17	Trolley Lift (applicable from November 2003)
ESF E-18	Lower Deck Galley Compartment (applicable from November 2003)

7. Environmental Standards:

A340-642 aircraft model:

Environmental requirements for noise, fuel venting and emissions:

ICAO Annex 16 Volume I, Aircraft noise (4th Edition, Amendment 8) – Chapter 4. The compliance of this chapter has been originally demonstrated through MOD 55005, not mandatory anymore.

ICAO Annex 16 Volume 2 - Part II for Fuel Venting

JAR 36 Aircraft noise May 1997 edition

ICAO Annex 16 Volume 2 – Emissions

A340-643 aircraft model:

Environmental requirements for noise, fuel venting and emissions:

ICAO Annex 16 Volume 1 – Chapter 4. The compliance of this chapter has been originally demonstrated through MOD 55005, not mandatory anymore.

ICAO Annex 16 Volume 2 - Part II for Fuel Venting

EASA CS-36 and JAR 36 Aircraft noise May 1997 edition

ICAO Annex 16 Volume 2 - Emissions

III. Technical Characteristics and Operational Limitations

Four turbo-fan, long range, twin-aisle, large category airplane.
It differs from the A340-300 series aircraft by addition of 20 frames.

1. A340-600 powered by Rolls Royce engines

1.1 Type Design Definition:

A340-642: EAL 415.0410/02

A340-643: F00RP0604310

1.2 Engines:

A340-642: Four (4) Rolls Royce RB211 Trent 556-61 or RB211 Trent 556A2-61 turbofan engines

A340-643: Four (4) Rolls Royce RB211 Trent 560A2-61 turbofan engines

1.2.1 Engine Limits:

Engine Limits Data Sheet 1056 (CAA) MIM62 (DGAC)	A340-642 RB211 Trent 556-61 RB211 Trent 556A2-61	A340-643 RB211 Trent 560A2-61
Static thrust at sea level: - take-off (5mn)*	58,462 lbs	61902 lbs
- maximum continuous	44,359 lbs	44,359 lbs
Approved oils: See Rolls Royce Service Bulletin RB.211-12-F139, latest revision		

* 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go-around in accordance with DGAC "Fiche de caractéristiques moteur").

Other engine limitations: See the relevant Engine Type Certificate Data Sheet.

1.3 Fuel

NOMENCLATURE	SPECIFICATION		
	FRANCE	U.S.A.	U.K.
KEROSENE	AIR 3405	ASTM D 1655 (JET A) (JET A1)	DERD 2494/2453
WIDE CUT	91056 (72845)	ASTM D 1655 (JET B)	DERD 2454/2486
	AIR 3407B	ML-T 5624 (JP4)	DERD 2454/2486

Additives: See Rolls Royce "RB211 Specific Operating Instructions for Trent 500", installation manual.

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

1.4 Limit Speeds

Refer to approved Airplane Flight Manual.

1.5 Centre of Gravity Range

Refer to approved Airplane Flight Manual.

1.6 Maximum Certified Weights

Valid for A340-642

Variant (MOD)	000 Basic	001 (50312)	101 (53043)	102 (54805)	103 (57713)
MTOW (T)	365	368	380	368	365
MLW (T)	256	259	265	259	265
MZFW (T)	242	245	251	245	251

Valid for A340-643

Variant (MOD)	101 (53043)	102 (54805)	103 (57713)
MTOW (T)	380	368	365
MLW (T)	265	259	265
MZFW (T)	251	245	251

1.7 Note

A340-642

RB211 Trent 556-61, RB211 Trent 556A2-61 engines can be intermixed on the same aircraft whatever the number or the position.

2. Data pertinent to all A340-600 series

2.1 Fuel quantity (0.8 kg/liter):

2.1.1 A340-642 without mod 53000 and without mod 54679

TANK		TANK CAPACITY							
		Usable fuel EIS Wing		Usable fuel LWW (mod 48487)		Unusable fuel EIS Wing		Unusable fuel LWW (mod 48487)	
		liters	(kg)	liters	(kg)	liters	(kg)	liters	(kg)
WING	Inner 1 / 4	49,002	39,202)	49,432	(39,546)	68	(54)	48	(38)
	Inner 2 / 3	69,514	55,611)	69,610	(55,688)	230	(184)	190	(152)
	Outer	12,290	(9,832)	12,620	(10,096)	34	(27)	44	(35)
	Total	130,806	(104,645)	131,662	(105,329)	332	(265)	282	(225)
CENTER		55,133*	(44,106)	55,133	(44,106)	240*	(192)	240	(192)
TRIM TANK	FCMC before FL 6.0	8,361	(6,689)	7,986	(6,389)	25	(20)	25	(20)
	FCMC FL 6.0 up to FL 7.0	7,986	(6,389)						
	FCMC FL 7.1 onwards	7,886	(6,309)	7,886	(6,309)				
TOTAL	FCMC before FL 6.0	194,300	(155,440)	194,781	(155,825)	597	(477)	547	(437)
	FCMC FL 6.0 up to FL 7.0	193,925	(155,140)						
	FCMC FL 7.1 onwards	193,825	(155,060)	194,681	(155,745)				

* For A/C not fitted with Jet Pumps (Mod 50812), values for CENTER Tank are: 54,969 liters (43,975 kgs) for usable and 404 liters (323 kgs) for unusable. Total are modified as follows:

TOTAL	FCMC before FL 6.0	194,136	(155,309)	194,781	(155,825)	761	(608)	547	(437)
	FCMC FL 6.0 up to FL 7.0	194,136	(155,009)						
	FCMC FL 7.1 onwards	193,661	(154,929)	194,681	(155,745)				

2.1.2 A340-642 with mod 54679

A maximum total of 2,800 liters can be added to the values identified in paragraph 2.1.1 starting refueling Center tank and continuing with Inner Tanks as necessary, according to the following added quantities:

- Center tank up to 1,050 liters
- Inner tank 2 / 3 up to 550 liters each
- Inner tank 1 / 4 up to 325 liters each

2.1.3 A340-642 with mod 53000, A340-643 (0.8 kg/l)

TANK		TANK CAPACITY			
		Usable fuel		Unusable fuel	
		Liters	(kg)	liters	(kg)
WING	Inner 1 / 4	49,178	(39,342)	56	(45)
	Inner 2 / 3	69,648	(55,718)	220	(176)
	Outer	12,442	(9,954)	54	(43)
	Total	131,268	(105,014)	330	(264)
CENTER		55,202	(44,161)	171	(137)
TRIM TANK	Basic	7,886	(6,309)	25	(20)
	Extended (Mod 54382)	9,509	(7,607)	45	(36)
TOTAL	Basic Trim Tank	194,356	(155,484)	526	(421)
	Extended Trim Tank (Mod 54382)	195,979	(156,783)	546	(437)

2.2 Minimum Flight Crew:

Two (2): Pilot and Co-pilot

2.3 Maximum Seating Capacity

The maximum number of passengers approved for emergency evacuation is 440.

See interior layout drawing for the maximum passenger capacities approved for each aeroplane when delivered.

2.4 Cargo compartment loading

Cargo compartment	Maximum load (kg)
Forward	30,482
Aft	22,861
Rear (bulk)	3,468

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weights), see Weight and Balance Manual Chapter 1.10 ref. 00F080A0601/C6S

2.5 Environmental Flight Envelope

Refer to approved Airplane Flight Manual.

2.6 Other Limitations

Refer to approved Airplane Flight Manual.

2.7 Auxiliary Power Unit (APU)

One HONEYWELL E. & S. 331-600[A] (Model Specification 31-15857-01).

Oils: refer to applicable approved Manuals.

2.8 Equipment:

The equipment required by the applicable requirements shall be installed. 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

2.9 All Weather Capabilities:

A340-642:

- If modification 50321 is embodied the aircraft is qualified to Cat 3 precision approach and autoland.

A340-643:

- The Aircraft is qualified to Cat 3 precision approach and autoland.

2.10 Wheels and Tyres:

Refer to relevant Airbus Service Bulletin.

2.11 Hydraulics:

Fluid specifications: TYPE IV (NSA 307-110).

2.12 Maintenance Instructions and Airworthiness Limitations:

- Limitations applicable to Safe Life Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) sub parts 1-2 and 1-3 approved by EASA;
- Limitations applicable to Damage-Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) part 2 approved by EASA;
- Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA;
- Limitations applicable to Ageing System Maintenance are provided in the A340 Airworthiness Limitation Section (ALS) Part 4 approved by EASA;
- Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5 approved by EASA;
- Maintenance Review Board Report.

SECTION 5: A340-500 SERIES

I. General

1. Aeroplane: Airbus A340-500

II. Certification Basis

1. Reference Application Date for EASA Certification: 31 December 1997
2. EASA Certification Date (JAA recommendation):
(DGAC-F TC 183 remains a valid reference for models certified before 28. September 2003)

A340-541: 03 December 2002
A340-542: 15 February 2007

3. EASA Certification Basis:

JAR 25 Change 14 plus Orange Paper 96/1
– Except JAR 25.365(g) which remains at Change 13 for the design of the cockpit wall.
JAR AWO Change 2

4. Special Conditions:

SC F-1001	Stalling and scheduled operating speeds
SC F-2	Motion and effect of cockpit controls
SC F-1003	Static longitudinal stability
SC F-4	Static directional and lateral stability
SC F-5	Flight envelope protection
SC F-6	Normal load factor limiting system
SC A-1002	Interaction of systems and structure
SC A-1003	Design Maneuver Requirements
SC A-1004	Design Dive Speed
SC A-5	Limit pilot forces and torque
SC A-1006	Grounds Loads and Conditions for Central Landing Gear
SC P-1016	Rear Centre Tank and Tyre Burst
SC P-1018	Engine Sustained imbalance
SC S-10.2	Effects of external radiation upon aircraft systems
SC S-1013	Autothrust System
SC S-16	Control Signal Authority
SC S-18	Electrical Flight Control unusual features
SC S-38	Towbarless Towing
SC E-2	Under floor crew rest compartment (option)
SC E-5.1	Lower deck lavatories (option)
SC E-8.1	Lower deck stowage compartment (option)
SC E-11	Bulk Crew Rest Compartment (option)
SC E-1014	HIC Compliance to Front Row Seating
SC E-19	F/C sliding screens (applicable from September 2003)
SC O-1001	Ferrying one engine unserviceable
SC G-7	Function and Reliability Testing
SC H-01	Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS (applicable from May 2010)

5. Exemption (temporary):

P-1024 ECAM EGT indication (cancelled by modification 50560)

6. Equivalent Safety Findings:

SC F-1008	Accelerate-stop distance (NPA 25BDG244)
SC F-1014	Flap Gates (NPA 25B238)
SC A-1001	Revised Loads Requirements (NPA 25C20 and NPA 25C282)
SC A-1011	Vibration, Buffet and Aeroelastic Requirements (NPA 25BCD236)
SC A-1015	Checked Pitching Maneuver Loads
SC A-1017	Braked Roll Conditions (NPA 25C-276)
SC A-1020	Shock Absorption test (NPA 25D-279)
SC A-1021	Engine Failure Loads
SC A-1023	Continuous Turbulence
SC A-1024	Casting Factors
SC A-1026	Proof of structure
SC S-1021	Brakes (partial NPA 25D-291)
SC S-45	Oil Indication
SC S-148	Longitudinal touch down performance and MABH deletion (NPA AWO 8)
SC S-1059	Hydraulics System
SC S-1070	AFM - Runway Visual Range Limits
SC P-1008	Fuel Tank Access Covers
SC P-1020	APU Instruments (NPA 25J246)
SC P-1021	Windmilling without oil (NPA 25E268)
SC P-1022	Falling and Blowing Snow (NPA 25E288)
ESF P-1009	Rolls-Royce Trent 500 Turbine Overheat Detection
ESF P-1011	Thrust Reverser Testing
ESF S-1065	Packs Off Operation
ESF S-1066	Excess deviation alert
ESF E-15	Reinforced Security Cockpit Door
ESF E-17	Trolley Lift (applicable from November 2003)
ESF E-18	Lower Deck Galley Compartment (applicable from November 2003)

7. Environmental Standards:

A340-541 aircraft model:

Environmental requirements for noise, fuel venting and emissions:

ICAO Annex 16 Volume 1 – Chapter 3 Aircraft noise 3rd edition 1993 (Amendment 6)

ICAO Annex 16 Volume 1 – Chapter 4 for Noise. The compliance of this chapter has been originally demonstrated through MOD 55005, not mandatory anymore.

JAR 36 Aircraft noise May 1997 edition

ICAO Annex 16 Volume 2 - Part II for Fuel Venting

ICAO Annex 16 Volume 2 - Emissions

A340-542 aircraft model:

Environmental requirements for noise, fuel venting and emissions:

ICAO Annex 16 Volume 1 – Chapter 4 for Noise. The compliance of this chapter has been originally demonstrated through MOD 55005, not mandatory anymore.

EASA CS-36 and JAR 36 Aircraft noise November 2004 edition.

ICAO Annex 16 Volume 2 - Part II for Fuel Venting

ICAO Annex 16 Volume 2 - Emissions

III. Technical Characteristics and Operational Limitations

Four turbo-fan, long range, twin-aisle, large category airplane.

It differs from the A340-600 series aircraft by suppression of 14 frames, and addition of a rear center tank.

1. A340-500 powered by Rolls Royce engines

1.1 Type Design Definition:

A340-541: EAL 415.1094/02

A340-542: EAL F01M06010396

1.2 Engines:

A340-541: Four (4) Rolls Royce RB211 Trent 553-61 or RB211 Trent 553A2-61 turbofan engines

A340-542: Four (4) Rolls Royce RB211 Trent 556A2-61 turbofan engines

1.2.1 Engine Limits:

Engine Limits Data Sheet 1056 (CAA) MIM62 (DGAC)	A340-541 RB211 Trent 553-61 RB211 Trent 553A2-61	A340-542 RB211 Trent 556A2-61
Static thrust at sea level: - take-off (5mn)* - maximum continuous	55,780 lbs 44,359 lbs	58,462 lbs 44,359 lbs
Approved oils: See Rolls Royce Service Bulletin RB.211-12-F139, latest revision		

* 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go-around in accordance with DGAC "Fiche de caractéristiques moteur").

Other engine limitations: See the relevant Engine Type Certificate Data Sheet.

1.3 Fuel

NOMENCLATURE	SPECIFICATION		
	FRANCE	U.S.A.	U.K.
KEROSENE	AIR 3405	ASTM D 1655 (JET A) (JET A1)	DERD 2494/2453
WIDE CUT	91056 (72845)	ASTM D 1655 (JET B)	DERD 2454/2486
	AIR 3407B	ML-T 5624 (JP4)	DERD 2454/2486

Additives: See Rolls Royce "RB211 Specific Operating Instructions for Trent 500", installation manual.

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

1.4 Limit Speeds

Refer to approved Airplane Flight Manual.

1.5 Centre of Gravity Range

Refer to approved Airplane Flight Manual.

1.6 Maximum Certified Weights

Valid for A340-541

Variant	000 (51000)	001 (51080)	002 (50791)	003* (54237)	004* (56719)	101 (53039)	102 (54806)	103 (55642)
MTOW (T)	368	372	372	374	374	380	372	372
MLW (T)	240	243	243	231	243	246	243	246
MZFW (T)	225	230	229	218	218	232	230	232

*WV003 and WV004 are only certified for those aircraft equipped with the Light Weight Wings and the 7-frame RCT.

Valid for A340-542

Variant	101 (53039)	102 (54806)	103 (55642)
MTOW (T)	380	372	372
MLW (T)	246	243	246
MZFW (T)	232	230	232

1.7 Notes

A340-541

RB211 Trent 553-61, RB211 Trent 553A2-61 engines can be intermixed on the same aircraft whatever the number or the position.

Conversion from A340-541 to A340-542 and engines change from 553A2-61 to 556A2-61: A340-541 aircraft can be converted into A340-542 aircraft by application of Airbus Service Bulletin A340-00-5010 (Mod 58770)

Conversion from A340-542 to A340-541 and engines change from 556A2-61 to 553A2-61: A340-542 aircraft can be converted into A340-541 aircraft by application of Airbus Service Bulletin A340-00-5009 (Mod 58771)

2. Data pertinent to all A340-500 series

2.1 Fuel quantity (0.8 kg/liter):

2.1.1 A340-541 without mod 53000

TANK		TANK CAPACITY							
		Usable fuel EIS Wing		Usable fuel LWW (Mod 48487)		Unusable fuel EIS Wing		Unusable fuel LWW (Mod 48487)	
		liters	(kg)	liters	(kg)	liters	(kg)	liters	(kg)
WING	Inner 1 / 4	49,002	(39,202)	49,432	(39,546)	68	(54)	48	(38)
	Inner 2 / 3	69,514	(55,611)	69,610	(55,688)	230	(184)	190	(152)
	Outer	12,290	(9,832)	12,620	(10,096)	34	(27)	44	(35)
	Total	130,806	(104,645)	131,662	(105,330)	332	(265)	282	(225)
CENTER		55,133	(44,106)	55,133	(44,106)	240	(192)	240	(192)
REAR CENTER 5 FRAME	Without liner (Mod 51344)	19,873	(15,898)	19,873	(15,898)	10	(8)	10	(8)
	With liner (Mod 51344)	19,741	(15,793)	19,741	(15,793)	100	(80)	100	(80)
REAR CENTER 7 FRAME		Doesn't exist		27,329	(21,863)	Doesn't exist		241	(193)
TRIM TANK	FCMC FL 7.1 onwards	7,886	(6,309)	7,886	(6,309)	25	(20)	25	(20)
TOTAL (with RCT 5 Frame)	Without liner (Mod 51344)	213,698	(170,958)	214,554	(171,643)	597	(485)	557	(445)
	With liner (Mod 51344)	213,566	(170,853)	214,422	(171,538)	697	(557)	647	(517)
TOTAL (with RCT 7 Frame)		Doesn't exist		222,010	(177,608)	Doesn't exist		788	(630)

* For aircraft with FCMC FL 6.0 up to FL 7.0, trim tank and total usable fuel quantities are increased by 100 liters (80 kg).

2.1.2 A340-541 with mod 53000, A340-542

TANK		TANK CAPACITY			
		Usable fuel		Unusable fuel	
		liters	(kg)	liters	(kg)
WING	Inner 1 / 4	49,178	(39,342)	56	(45)
	Inner 2 / 3	69,648	(55,718)	220	(176)
	Outer	12,442	(9,954)	54	(43)
	Total	131,268	(105,014)	330	(264)
CENTER		55,202	(44,161)	171	(137)
REAR CENTER 5 FRAME	With liner	19,741	(15,793)	100	(80)
TRIM TANK	Extended	9,509	(7,607)	45	(36)
TOTAL (With Extended trim tank and RCT 5 Fram)		215,720	(172,576)	646	(517)

2.2 Minimum Flight Crew:
Two (2): Pilot and Co-pilot

2.3 Maximum Seating Capacity
The maximum number of passengers approved for emergency evacuation is 375.

See interior layout drawing for the maximum passenger capacities approved for each aeroplane when delivered.

2.4 Cargo compartment loading

Cargo compartment	Maximum load (kg)
Forward	24,494
Aft	16,330
Rear (bulk)	3,458

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weights), see Weight and Balance Manual Chapter 1.10 ref. 00F080A0501/C5S for A340-541 and A340-542.

2.5 Environmental Flight Envelope
Refer to approved Airplane Flight Manual.

2.6 Other Limitations
Refer to approved Airplane Flight Manual.

2.7 Auxiliary Power Unit (APU)
One HONEYWELL E. & S. 331-600[A] (Model Specification 31-15857-01).
Oils: refer to applicable approved Manuals

2.8 Equipment
The equipment required by the applicable requirements shall be installed.
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

2.9 All Weather Capabilities

A340-541:

- If modification 51315 is embodied the aircraft is qualified to Cat 3 precision approach and autoland.

A340-542:

- The Aircraft is qualified to Cat 3 precision approach and autoland.

2.10 Wheels and Tyres

Refer to relevant Airbus Service Bulletin

2.11 Hydraulics

Fluid specifications: TYPE IV (NSA 307-110).

2.12 Maintenance Instructions and Airworthiness Limitations

- Limitations applicable to Safe Life Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) sub parts 1-2 and 1-3 approved by EASA;
- Limitations applicable to Damage-Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) part 2 approved by EASA;
- Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA;
- Limitations applicable to Ageing System Maintenance are provided in the A340 Airworthiness Limitation Section (ALS) Part 4 approved by EASA;
- Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5 approved by EASA;
- Maintenance Review Board Report.

SECTION 6: CHANGE RECORD

TCDS Issue No	TCDS Date	TCDS Changes	TC Date
17.0	27/11/09	<p>Page 10 Section 2.III.1.7 Amended engine intermix applicability for A340-213 (deletion of CFM56-5C4/1P)</p> <p>Page 13 Section 2.III.2.12 Introduction of reference to ALS 4, and deletion of Certification Document reference numbers</p> <p>Page 18 Section 3.III.1.7 Amended engine intermix applicability for A340-313 (deletion of CFM56-5C4/1P)</p> <p>Page 21 Section 3.III.2.12 Introduction of reference to ALS 4, and deletion of Certification Document reference numbers</p> <p>Page 24 Section 4.III.1.2.1 Introduction of reference to Approved Oil documentation</p> <p>Page 27 Section 4.III.2.1.3 Amended fuel tank capacity values</p> <p>Page 28 Section 4.III 2.12 Introduction of reference to ALS 4, and deletion of Certification Document reference numbers</p> <p>Page 31 Section 5.III.1.2.1 Introduction of reference to Approved Oil documentation</p> <p>Page 32 Section 5.III 1.6 Mod number corrected (Variant 103)</p> <p>Page 32 Section 5.III.1.7 Addition of two notes: -Conversion from A340-541 to A340-542 -Conversion from A340-542 to A340-541</p> <p>Page 33 Section 5.III.2.1.2 Amended fuel tank capacity values</p> <p>Page 35 Section 5.III.2.12 Introduction of reference to ALS 4, and deletion of Certification Document reference numbers</p> <p>Page 36 Section 6. Introduction of Change Record</p>	15/02/07
18.0	11/05/10	<p>Update §2.1 – Fuel quantity for A330-300</p> <p>Introduction of MOD 200118 for A340-313</p> <p>Update of § Environmental Standards for all models</p>	15/02/07
19.0	11/06/10	<p>Addition of CRI H-01 as Special Condition (Enhanced Airworthiness Programme for Aeroplane Systems - ICA for EWIS)</p> <p>Typo error in the fuel quantity table for A340-642 §2.1.1</p>	15/02/07
20.0	21/10/10	<p>Correction of Special Condition numbers and titles in Section 4.II.4, 4.II.6, 5.II.4 and 5.II.6.</p> <p>Deletion of SC P-1016 from Section 4.II.4</p>	15/02/07