TYPE-CERTIFICATE

DATA SHEET

No. EASA.A.015

for

AIRBUS A340

Type Certificate Holder

AIRBUS

2 Rond-Point Emile Dewoitine
31700 Blagnac
France

For Models:

A340-211    A340-311    A340-541    A340-642
A340-213    A340-313
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## CORRESPONDANCE TABLE MODELS / ENGINE MANUFACTURERS

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   1.2 Model
       A340-211, A340-212, A340-213

2. Airworthiness Category
   Large Aeroplanes
   Performance Category A

3. Manufacturer
   AIRBUS
   2 Rond-Point Emile Dewoitine
   31700 Blagnac FRANCE

4. State of Design Authority Type Certification
   4.1 State of Design Authority
       DGAC-F
   4.2 Application Date
       A340-211: 15 June 1988
       A340-212: 15 June 1988
       A340-213: 15 June 1988
   4.3. State of Design Authority Type Certificate Date
       A340-211: 22 December 1992
       A340-212: 14 March 1994
       A340-213: 19 December 1995

5. EASA Type Certification
   5.1 State of Design Authority
       N/A
   5.2 Application Date
       N/A
   5.3. State of Design Authority Type Certificate Date
       N/A
       DGAC-F TC 183 remains a valid reference for models certified before 28 September 2003
SECTION 1: A340-200 SERIES (Cont’d)

II. Certification Basis

1. Reference Date for determining the applicable requirements

Reference Application Date for EASA Certification: 15 June 1988

2. Airworthiness Requirements

Original Airworthiness Requirements (at time of TC):
- Certification Requirements
  JAR 25 Change 13 effective on October 5, 1989 except as follows:
  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
  - All Weather Operations
    JAR AWO Change 1
    NPA JAR AWO-3 (Take-off in low visibility)

Additional Airworthiness Requirements (added post TC):
- Airborne Communication, Navigation, Surveillance
  CS-ACNS Initial Issue
  Note: For compliance to CS-ACNS Subpart B, Section 2, a deviation to CS-ACNS.B.DLS.B1.075 is accepted by CRI ACNS.B-GEN-01 to not include DM89 MONITORING [unit name] [frequency] in the downlink message set installed.
  - Subpart D – for optional modifications installing transponders aiming at answering to SES mandate as defined in (EU) No 1207/2011 and amended by (EU) No 1028/2014 of 26 September 2014.

3. Special Conditions

Original Special Conditions part of Certification Basis (at time of TC):
- JAA Numbering:
  SC A-1  Discrete gust requirements (NPA 25C-205)
  SC A-2  Interaction of systems and structure (NPA 25C-199)
  SC A-3  Design manoeuvr 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 G-5  Resistance to fire terminology (NPA 25D-181)
SC G-7  Function and reliability testing
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 S-148 Longitudinal touchdown performance limit and Minimum Approach Break-Off Height (NPA AWO-8, this SC replaces S-48)
SC P-1  FADEC
SC P-2  Centre of gravity control system

Additional Special Conditions part of Certification Basis (added post TC):
- JAA Numbering:
  SC P-27  Flammability Reduction System
            (applicable from June 2010)
  SC P-32  Fuel Tank Safety
            (applicable from November 2013)
  SC E-2  Crew rest
            (applicable from February 1993)
  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 E-28 Partial Bulk Crew Rest Compartment with attached to galley
            (applicable from January 2009)
  SC E-128 Improved flammability standards for thermal/acoustic insulation
            (applicable from February 2009)
  SC E-130 Application of heat release and smoke density requirements to seat materials
            (applicable from February 2010)
  SC E-1014 HIC compliance for front row seating (inflatable restraints)
            (applicable from July 2007)
  SC F-GEN-01 Installation of non-rechargeable lithium battery
            (applicable by the date of this TCDS EASA.A.015 at issue 25)
SC H-01 Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS (applicable from May 2010)

- EASA Numbering:
  SC D-100 Installation of mini suite type seating (applicable from April 2018)
  SC D-102 Incorporation of Inertia Locking Device in Dynamic Seats (applicable from January 2019)
  SC F-126 Flight Recorders including Data Link Recording (applicable from June 2013)
  SC F-131 Flight Instrument External Probes – Qualification in Icing Conditions (applicable from April 2016)
  SC F-137 Security Protection of Aircraft Systems and Networks (applicable from May 2018)

4. Exemptions
None

5. Deviations
None

6. Equivalent Safety Findings

Original Equivalent Safety Findings part of Certification Basis (at time of TC):

- JAA Numbering:
  ESF S-45 Oil temperature indication

The following Special Conditions provide an equivalent safety level to JAR 25 accelerate-stop and brakes qualification requirements (NPA 25 B, D, G 244)
  - SC F-8 (or F-8.1) Accelerate stop distances
  - SC S-21 Brakes wear limits

For A340-213 Weight Variant 021 only:
  - SC F-8.1 is applicable instead of SC F-8.

Additional Equivalent Safety Findings part of the Certification Basis (added post TC):
The following Equivalent Safety Findings are additionally applicable when an A/C configuration include the subject optional design change(s):

- JAA Numbering:
  ESF E-15 Reinforced security cockpit door (applicable from July 2002)
  ESF E-17 Trolley Lift (applicable from November 2003)
  ESF E-18 Lower Deck galley compartment (applicable from November 2003)
  ESF E-21 Emergency exit marking reflectance (applicable from December 2004)
  ESF E-27 Forward facing seats over 18 degrees to A/C centreline (applicable from June 2009)
ESF E-29 Fuselage burn through – aft pressure bulkhead  
(applicable from March 2009)
ESF E-30 Fuselage burn through – belly fairing  
(applicable from April 2009)
ESF E-31 Fuselage burn through – bilge area  
(applicable from April 2009)
ESF E-134 Installation of seats that make an angle of more than 18° with the aircraft longitudinal axis  
(applicable from November 2013)
ESF E-1022 Improved flammability standards for thermal/ acoustic insulation materials, it provides an equivalent level of safety to JAR 25.853(b)  
(applicable from August 2005)
ESF F-128 Minimum Mass Flow of Supplemental Oxygen, it provides an equivalent level of safety to JAR 25.1443(c)  
(applicable from November 2014).
ESF F-129 Crew Determination of Quantity of Oxygen in Passenger Oxygen System, it provides an equivalent level of safety to JAR 25.1441(c)  
(applicable from November 2014).

- EASA Numbering: 
ESF D-101 Green arrow and “Open” Placard of Emergency Exit marking, it provides an equivalent level of safety to CS 25.811(e)(4) amd 3, when the aircraft is equipped with symbolic exit signs (applicable from July 2018).

7. Environmental Protection

Environmental requirements for noise, fuel venting and emissions:
- Noise: ICAO Annex 16 – Volume I  
(See EASA TCDSN A.015 for details)
Note: MOD 55005 originally used for compliance demonstration is not mandatory anymore.
- Fuel venting and emissions: ICAO Annex 16 – Volume II

8. Operational Suitability Data (OSD)

See SECTION: DATA PERTINENT TO ALL MODELS for: 
- Operational Suitability Requirements
- EASA Approved Operational Suitability Data
SECTION 1: A340-200 SERIES (Cont’d)

IIl. Technical Characteristics and Operational Limitations

1. Type Design Definition

With CFM International (CFMI) engines
A340-211: 00F000A0211/C00
A340-212: 00F000A0212/C00
A340-213: 00F000A0213/C00

2. Description

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

3. Equipment

Refer to Type Design Definition.

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.

4. Dimensions

- Length: 59,39m (194ft 10in)
- Diameter: 05,64m (18ft 6in)
- Wing Span: 60,30m (197ft 10in)
- Height: 16,83 m (55ft 3in)

5. Engine

5.1 Model

CFM International (CFMI) 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

5.2 Type Certificate

CFM International (CFMI) engines
FAA Engine TCDS: E37NE
EASA Engine TCDS: EASA.E.003
5.3 Limitations

5.3.1 Installed Engine Limits

**CFM International (CFMI) engines**

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<th>A340-212</th>
<th>A340-213</th>
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<td>CFM56-5C3/F</td>
<td>CFM56-5C4</td>
</tr>
<tr>
<td>Data Sheet</td>
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<td>CFM56-5C3/F4</td>
<td>CFM56-5C4/1</td>
</tr>
<tr>
<td>E37NE (FAA)</td>
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<td>CFM56-5C3/G</td>
<td>CFM56-5C4/P</td>
</tr>
<tr>
<td>E.003 (EASA)</td>
<td>CFM56-5C2/F4</td>
<td>CFM56-5C3/G4</td>
<td>CFM56-5C4/P</td>
</tr>
<tr>
<td>Static thrust at sea level:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- take-off (5mn)* (flat rated 30°C)</td>
<td>13,878 daN</td>
<td>14,456 daN</td>
<td>15,124 daN</td>
</tr>
<tr>
<td>- maximum continuous</td>
<td>12,588 daN</td>
<td>13,078 daN</td>
<td>13,371 daN</td>
</tr>
</tbody>
</table>

Approved Oils: see CFMI engine Service Bulletin N°79-001, 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

6. Fluids (Fuel / Oil / Additives / Hydraulics)

6.1 Fuel

The following fuels may be used:

<table>
<thead>
<tr>
<th>ENGINES</th>
<th>KEROSENE DESIGNATION</th>
</tr>
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</table>

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

Refer to Consumable Material List (CML) for details on approved fuel specifications.

6.2 Oil

Refer to the Consumable Material List (CML).

Refer to Engine and APU Manufacturers Operating Instructions.

6.3 Additives

Refer to the Consumable Material List (CML).

See CFMI "Specific Operating Instructions", installation manual.

6.4 Hydraulics

Refer to the Consumable Material List (CML).
7. Fluid capacities

7.1 Fuel

Fuel quantity (0.8 kg / litre):

A340-211, A340-212, A340-213

<table>
<thead>
<tr>
<th>3 – TANK AIRPLANE</th>
<th>Usable fuel liters (kg)</th>
<th>Usable fuel liters (MOD 46761)</th>
<th>Usable fuel liters (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WING TANK</td>
<td>91 056 (72 845)</td>
<td>91 056 (72 845)</td>
<td>245 (196)</td>
</tr>
<tr>
<td>CENTER</td>
<td>41 468 (33 174)</td>
<td>41 468 (33 174)</td>
<td>83 (66)</td>
</tr>
<tr>
<td>TRIM TANK</td>
<td>6 114 (4 891)</td>
<td>6 230 (4 984)</td>
<td>6 (5)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>138 638 (110 910)</td>
<td>138 754 (111 003)</td>
<td>334 (267)</td>
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</table>

A340-213 Weight Variant 021 and on

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

7.2 Oil

Refer to Weight & Balance Manual.

7.3 Coolant system capacity

N/A

8. Air Speeds Limits

Refer to approved Aeroplane Flight Manual.

9. Rotor Speed Limits

N/A

10. Maximum Operating Altitude and Temperature

10.1 Altitude

Maximum Flight level: 41 100 ft (12 527 m)

Maximum Airfield altitude: 12 500 ft (3 810 m)

10.2 Temperature

Flight: Minimum: -74°C SAT

Ground: Range: -54°C to +55°C
11. Operating Limitations

Refer to approved Aeroplane Flight Manual for maximum demonstrated crosswind.

Wind Speed Limitations:

- **Crosswind:**
  - Takeoff: A/C: 37.5kt (gust included)
  - Landing: A/C: 41kt (gust included)

- **Tailwind:**
  - Takeoff: 10kt
  - Landing: 10kt

12. Maximum Weight

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

<table>
<thead>
<tr>
<th>Variant (MOD)</th>
<th>000 (Basic)</th>
<th>001 (41302)</th>
<th>002 (44229)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTOW (T)</td>
<td>235.5</td>
<td>257</td>
<td>260</td>
</tr>
<tr>
<td>MLW (T)</td>
<td>181</td>
<td>181</td>
<td>181</td>
</tr>
<tr>
<td>MZFW (T)</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
</tbody>
</table>

Valid for A340-213 Weight Variant 020

<table>
<thead>
<tr>
<th>Variant (MOD)</th>
<th>021 (44281)</th>
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</thead>
<tbody>
<tr>
<td>MTOW (T)</td>
<td>275</td>
</tr>
<tr>
<td>MLW (T)</td>
<td>185</td>
</tr>
<tr>
<td>MZFW (T)</td>
<td>173</td>
</tr>
</tbody>
</table>

13. Centre of Gravity Range

Refer to approved Aeroplane Flight Manual.

14. Datum / Mean Aerodynamic Chord (MAC)

Datum: Station 0.0, located 6,382 meters forward of aeroplane nose.

MAC: 7,290m

15. Levelling Means

Three primary jacking points: Refer to approved Weight and Balance Manual.

16. Minimum Flight Crew

Two (2): Pilot and Co-pilot.

17. Passenger Emergency Exit

Two Passenger Emergency Exit configurations:

- Configuration A-A-I-A: Basic 3 Type A passenger doors and 1 Emergency Exit Type I
18. Maximum Passenger Seating Capacity and associated Minimum Number of Cabin Crew

The maximum number of passengers approved for emergency evacuation is:
- 375 Basic

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

The table below provides the certified Maximum Passenger Seating Capacities (MPSC), the corresponding cabin configuration (exit arrangement and modifications) and the associated minimum numbers of cabin crew members used to demonstrate compliance with the certification requirement:

<table>
<thead>
<tr>
<th>Maximum Passenger Seating Capacity (MPSC) &amp; Cabin Configuration</th>
<th>Minimum Cabin crew</th>
</tr>
</thead>
<tbody>
<tr>
<td>420 Configuration A-A-A-A (MOD 40161)</td>
<td>9</td>
</tr>
<tr>
<td>400 Configuration A-A-A-A (MOD 40161)</td>
<td>8</td>
</tr>
<tr>
<td>375 Configuration A-A-I-A (Basic)</td>
<td>8</td>
</tr>
</tbody>
</table>

A lower number of cabin crew may be approved by EASA for specific cabin layouts.

19. Maximum Baggage/Cargo Loads

<table>
<thead>
<tr>
<th>Cargo compartment</th>
<th>Maximum load (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward</td>
<td>18507</td>
</tr>
<tr>
<td>Aft</td>
<td>15241</td>
</tr>
<tr>
<td>Rear (bulk)</td>
<td>3468</td>
</tr>
</tbody>
</table>

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

20. Rotor Blade control movement

N/A

21. Auxiliary Power Unit (APU)

One GARRETT (Company name changed to Honeywell International Inc. in 1999):
- GTCP 331-350C (Specification 31-7677A)

22. Life-limited parts

Refer to Airworthiness Limitation Section

See SECTION: DATA PERTINENT TO ALL MODELS.

23. Wheels and Tyres

Refer to Airbus Service Bulletin A340-32-4007.
A340-200 SERIES – Cont’d

IV. Operating and Service Instructions

In accordance with EASA Part 21 regulation, Airbus provide on-demand access to the following technical publications to any person required to comply with any of those instructions:

(Access via AirbusWorld portal)

1. Flight Manual (AFM)
   Ref. AFM 34000 (latest published revision)

   Refer to Customized Maintenance Manuals published by Airbus (latest published revision)

3. Structural Repair Manual (SRM)
   Refer to Customized SRM published by Airbus (latest published revision)

4. Weight and Balance Manual (W&BM)
   Refer to Customized W&BM published by Airbus (latest published revision)

5. Illustrated Parts Catalogue (IPC)
   Refer to Customized IPC published by Airbus (latest published revision)

6. Service Bulletins (SBs)
   Refer to applicability section of Airbus Service Bulletins (latest published revision)

7. Required Equipment
   The equipment required by the applicable regulation shall be installed.
   Refer also to MMEL – See SECTION: DATA PERTINENT TO ALL MODELS.
A340-200 SERIES—Cont’d

V. Notes

1. All Weather Capability

<table>
<thead>
<tr>
<th>A/C Model</th>
<th>CFMI Engines</th>
</tr>
</thead>
<tbody>
<tr>
<td>A340-211</td>
<td>A340-212</td>
</tr>
<tr>
<td>Type Design Capability</td>
<td>-</td>
</tr>
<tr>
<td>Option Capability (MOD)</td>
<td>Cat 2 Precision approach (41549)</td>
</tr>
</tbody>
</table>

2. Conversions between Models

The following A/C Model conversions are approved:
- 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).

The following A/C Model engine configuration changes are approved:
- A340-211 (Mod. 42680 or Mod. 43092 or Mod 44752 or Mod 51296):
- 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 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).

3. Change of Weight Variants

N/A

4. Other Notes

- 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 maximum 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 (CFM56-5C3/G or CFM56-5C3/G4 or CFM56-5C3/P engines)
- A340-213 (CFM56-5C4 or CFM56-5C4/P or CFM56-5C4/1P engines):

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

- A340-213 (Mod 44260):

  When CFM56-5C4/1 Engines are installed, the thrust bump can be activated by Mod 44260.
SECTION 2: A340-300 SERIES

I. General

1. Type / Model
   1.1 Type
       A340
   1.2 Model
       A340-311, A340-312, A340-313

2. Airworthiness Category
   Large Aeroplanes
   Performance Category A

3. Manufacturer
   AIRBUS
   2 Rond-Point Emile Dewoitine
   31700 Blagnac FRANCE

4. State of Design Authority Type Certification
   4.1 State of Design Authority
       DGAC-F
   4.2 Application Date
       A340-311: 15 June 1988
       A340-312: 15 June 1988
       A340-313: 15 June 1988

   4.3. State of Design Authority Type Certificate Date
       A340-311: 22 December 1992
       A340-312: 14 March 1994
       A340-313: 16 March 1995

   DGAC-F TC 183 remains a valid reference for models certified before 28 September 2003
SECTION 2: A340-300 SERIES (Cont’d)

II. Certification Basis

1. Reference Date for determining the applicable requirements

   Reference Application Date for EASA Certification: 15 June 1988

2. Airworthiness Requirements

   Original Airworthiness Requirements (at time of TC):

   - Certification Requirements
     JAR 25 Change 13 effective on October 5, 1989 except as follows:
     - Paragraph 25.561 is applied at change 12 for wing tanks 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 as an acceptable alternative.

   - All Weather Operations
     JAR AWO Change 1
     NPA JAR AWO-3 (Take-off in low visibility)

   Additional Airworthiness Requirements (added post TC):

   - Airborne Communication, Navigation, Surveillance
     CS-ACNS Initial Issue
       Note: For compliance to CS-ACNS Subpart B, Section 2, a deviation to CS-ACNS.B.DLS.B1.075 is accepted by CRI ACNS.B-GEN-01 to not include DM89 MONITORING [unit name] [frequency] in the downlink message set installed.
     - Subpart D – for optional modifications installing transponders aiming at answering to SES mandate as defined in (EU) No 1207/2011 and amended by (EU) No 1028/2014 of 26 September 2014.

3. Special Conditions

   Original Special Conditions part of Certification Basis (at time of TC):

   - JAA Numbering:
     SC A-1 Discrete gust requirement (NPA 25C-205)
     SC A-2 Interaction of systems and structure (NPA 25C-199)
     SC A-3 Design manoeuver requirements
     SC A-4 Design dive speed VD
     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 G-5  Resistance to fire terminology (NPA 25D-181)
SC G-7  Function and reliability testing
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 control
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 S-148 Longitudinal touchdown performance limit and Minimum Approach Break-Off Height ((NPA AWO-8, this SC replaces S-48)
SC P-1  FADEC
SC P-2  Centre of gravity control system

Additional Special Conditions part of the Certification Basis (added Post TC):
The following Special Conditions are additionally applicable when an A/C configuration include
the subject optional design change(s):

- JAA Numbering:
  SC P-27  Flammability Reduction System  
  (applicable from June 2010)
  SC P-32  Fuel Tank Safety  
  (applicable from November 2013)
  SC E-2  Crew rest  
  (applicable from February 1993)
  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 E-28 Partial Bulk Crew Rest Compartment with attached to galley  
  (applicable from January 2009)
  SC E-128 Improved flammability standards for thermal/acoustic insulation  
  (applicable from January 2009)
  SC E-130 Application of heat release and smoke density requirements to seat materials  
  (applicable from February 2010)
  SC E-1014 HIC compliance for front row seating (inflatable restraints)  
  (applicable from July 2007)
  SC F-GEN-01: Installation of non-rechargeable lithium battery  
  (applicable by the date of this TCDS EASA.A.015 at issue 25)
SC H-01  Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS
(applicable from May 2010)

- EASA Numbering:
  SC D-100  Installation of mini suite type seating
  (applicable from April 2018)
  SC D-102  Incorporation of Inertia Locking Device in Dynamic Seats
  (applicable from January 2019)
  SC F-126  Flight Recorders including Data Link Recording
  (applicable from June 2013)
  SC F-131  Flight Instrument External Probes – Qualification in Icing Conditions
  (applicable from April 2016)
  SC F-137  Security Protection of Aircraft Systems and Networks
  (applicable from May 2018)

4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

Original Equivalent Safety Findings part of Certification Basis (at time of TC):

- JAA Numbering:
  ESF S-45  Oil temperature indication
  ESF S-48  Minimum Approach Break-off

The following Special Conditions provide an equivalent safety level to JAR 25 accelerate-stop and brakes qualification requirements (NPA 25 B, D, G 244)

- SC F-8 (or F-8.1)  Accelerate stop distances
- SC S-21  Brakes wear limits

For A340-313 Weight Variant 020, 021, 024, 026, 027, 028 only:
- SC F-8.1 is applicable instead of SC F-8.

Additional Equivalent Safety Findings part of the Certification Basis (added post TC):

The following Equivalent Safety Findings are additionally applicable when an A/C configuration include the subject optional design change(s):

- JAA Numbering:
  ESF E-15  Reinforced security cockpit door
  (applicable from July 2002)
  ESF E-17  Trolley Lift
  (applicable from November 2003)
  ESF E-18  Lower Deck galley compartment
  (applicable from November 2003)
  ESF E-21  Emergency exit marking reflectance
  (applicable from December 2004)
ESF E-27  Forward facing seats over 18 degrees to A/C centreline  
(applicable from June 2009)
ESF E-29  Fuselage burn through – aft pressure bulkhead  
(applicable from March 2009)
ESF E-30  Fuselage burn through – belly fairing  
(applicable from April 2009)
ESF E-31  Fuselage burn through – bilge area  
(applicable from April 2009)
ESF E-134  Installation of seats that make an angle of more than 18° with the aircraft  
longitudinal axis (applicable from November 2013)
ESF E-1022  Improved flammability standards for thermal/ acoustic insulation materials, it  
provides an equivalent level of safety to JAR 25.853(b) (applicable from August 2005)
ESF F-128  Minimum Mass Flow of Supplemental Oxygen, it provides an equivalent level of  
safety to JAR 25.1443(c) (applicable from November 2014).
ESF F-129  Crew Determination of Quantity of Oxygen in Passenger Oxygen System, it  
provides an equivalent level of safety to JAR 25.1441(c) (applicable from November 2014).

- EASA Numbering:
  ESF D-101  Green arrow and “Open” Placard of Emergency Exit marking, it provides an  
equivalent level of safety to CS 25.811(e)(4) amdt 3, when the aircraft is  
equipped with symbolic exit signs (applicable from July 2018).

7. Environmental Protection

Environmental requirements for noise, fuel venting and emissions:
- Noise: ICAO Annex 16 – Volume I  
  (See EASA TCDSN A.015 for details)
  Note: MOD 55005 originally used for compliance  
demonstration is not mandatory anymore.
- Fuel venting and emissions: ICAO Annex 16 – Volume II

8. Operational Suitability Data (OSD)

See SECTION: DATA PERTINENT TO ALL MODELS for:
- Operational Suitability Requirements
- EASA Approved Operational Suitability Data
SECTION 1: A340-300 SERIES (Cont’d)

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

   With CFM International (CFMI) engines
   A340-311: 00F000A0311/C00
   A340-312: 00F000A0312/C00
   A340-313: 00F000A0313/C00

2. Description

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

3. Equipment

   Refer to Type Design Definition.
   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.

4. Dimensions

   - Length: 63,66m (208ft 10in)
   - Diameter: 05,64m (18ft 6in)
   - Wing Span: 60,30m (197ft 10in)
   - Height: 16,63 m (54ft 7in)

5. Engine

   5.1 Model

   With CFM International (CFMI) 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

   5.2 Type Certificate

   CFM International (CFMI) engines
   FAA Engine TCDS: E37NE
   EASA Engine TCDS: EASA.E.003
5.3 Limitations

5.3.1 Installed Engine Limits

**CFM International (CFMI) engines**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CFM56-5C2</td>
<td>CFM56-5C2/4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFM56-5C2/F</td>
<td>CFM56-5C2/F4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFM56-5C2/G</td>
<td>CFM56-5C2/G4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFM56-5C2/P</td>
<td>CFM56-5C2/P</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Static thrust at sea level:
- take-off (5mn) * (flat rated 30°C)
- maximum continuous

|  | 13,878 daN | 14,456 daN | 15,124 daN |
|  | 12,588 daN | 13,078 daN | 13,371 daN |

Approved Oils: see CFMI engine Service Bulletin N°79-001, 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

6. Fluids (Fuel / Oil / Additives / Hydraulics)

6.1 Fuel

The following fuels may be used:

<table>
<thead>
<tr>
<th>ENGINES</th>
<th>KEROSENE DESIGNATION</th>
</tr>
</thead>
</table>

The above mentioned fuels and additives are also suitable for the APU. Refer to Consumable Material List (CML) for details on approved fuel specifications.

6.2 Oil

Refer to the Consumable Material List (CML).
Refer to Engine and APU Manufacturers Operating Instructions.

6.3 Additives

Refer to the Consumable Material List (CML).
See CFMI "Specific Operating Instructions", installation manual.

6.4 Hydraulics

Refer to the Consumable Material List (CML).
7. Fluid capacities

7.1 Fuel

Fuel quantity (0.8 kg / litre):

<table>
<thead>
<tr>
<th>3-TANK AEROPLANE</th>
<th>Usable fuel liters (kg)</th>
<th>(Unusable fuel litres (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WING TANK</td>
<td>91,056 (72,845)</td>
<td>245 (196)</td>
</tr>
<tr>
<td>CENTER</td>
<td>41,468 (33,174)</td>
<td>83 (66)</td>
</tr>
<tr>
<td>TRIM TANK</td>
<td>6,114 (4,891)</td>
<td>6 (5)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>138,638 (110,910)</td>
<td>334 (267)</td>
</tr>
</tbody>
</table>

A340-312 WV 029
A340-313 WV 020 without MOD 49428 and without MOD 200118 and MOD 202897

<table>
<thead>
<tr>
<th>3 – TANK AIRPLANE</th>
<th>Usable fuel liters (kg)</th>
<th>3 – TANK AIRPLANE WITH OPTIONAL ACTs MOD 42612</th>
<th>Usable fuel liters (kg)</th>
<th>Unusable fuel litres (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WING TANK</td>
<td>92,850 (74,280)</td>
<td>92,850 (74,280)</td>
<td>245 (196)</td>
<td></td>
</tr>
<tr>
<td>CENTER</td>
<td>42,420 (33,936)</td>
<td>42,420 (33,936)</td>
<td>83 (66)</td>
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</tr>
<tr>
<td>TRIM TANK</td>
<td>6,230 (4,984)</td>
<td>6,230 (4,984)</td>
<td>6 (5)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>141,500 (113,200)</td>
<td>148,700 (118,960)</td>
<td>362 (290)</td>
<td></td>
</tr>
</tbody>
</table>

1 ACT in cargo hold - 7,200 (5,760) 28 (22)
TOTAL with 1 ACT in cargo hold - 147,840 (118,960) 362 (290)

7.2 Oil

Refer to Weight & Balance Manual.

7.3 Coolant system capacity

N/A.

8. Air Speeds Limits

Refer to approved Aeroplane Flight Manual.

9. Rotor Speed Limits

N/A
10. Maximum Operating Altitude and Temperature

10.1 Altitude
Maximum Flight level: 41 450 ft (12 634m)
Maximum Airfield altitude: 12 500 ft (3 810m)

10.2 Temperature
Flight: Minimum: -78°C SAT
Ground: Range: -54°C to +55°C

11. Operating Limitations
Refer to approved Aeroplane Flight Manual for maximum demonstrated crosswind.

Wind Speed Limitations:
- Crosswind: Takeoff: A/C : 37,5kt (gust included)
  Engine: Refer to AFM Limitation section
  Landing: A/C : 41kt (gust included)
  Engine: Refer to AFM Limitation section
- Tailwind: Takeoff: 10kt
  Landing: 10kt

12. Maximum Weight
Valid for A340-311, A340-312 and A340-313

<table>
<thead>
<tr>
<th>Variant (MOD)</th>
<th>000 (Basic)</th>
<th>001 (41302)</th>
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<td>235.5</td>
<td>257</td>
<td>260</td>
<td>257</td>
<td>260</td>
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<tr>
<td>MLW (T)</td>
<td>186</td>
<td>186</td>
<td>186</td>
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<td>188</td>
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<td>MZFW (T)</td>
<td>174</td>
<td>174</td>
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<td>178</td>
<td>178</td>
</tr>
</tbody>
</table>

Valid for A340-312 only

<table>
<thead>
<tr>
<th>Variant</th>
<th>029 (53243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTOW (T)</td>
<td>260</td>
</tr>
<tr>
<td>MLW (T)</td>
<td>188</td>
</tr>
<tr>
<td>MZFW (T)</td>
<td>178</td>
</tr>
</tbody>
</table>

Valid for A340-313 only

<table>
<thead>
<tr>
<th>Variant</th>
<th>020 (43500)</th>
<th>021 (44135)</th>
<th>023 (44625)</th>
<th>024 (45738)</th>
<th>025 (44791)</th>
<th>026 (46613)</th>
<th>027 (46650)</th>
<th>028 (49529)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTOW (T)</td>
<td>271</td>
<td>275</td>
<td>262</td>
<td>275</td>
<td>260</td>
<td>275</td>
<td>271</td>
<td>276.5</td>
</tr>
<tr>
<td>MLW (T)</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>192</td>
<td>190</td>
<td>192</td>
<td>192</td>
<td>190</td>
</tr>
<tr>
<td>MZFW (T)</td>
<td>178</td>
<td>178</td>
<td>178</td>
<td>180</td>
<td>178</td>
<td>181</td>
<td>178</td>
<td>178</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variant</th>
<th>050 (51808)</th>
<th>051 (51809)</th>
<th>052 (51810)</th>
<th>053 (55566)</th>
<th>054 (55677)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTOW (T)</td>
<td>275</td>
<td>275</td>
<td>276.5</td>
<td>276.5</td>
<td>275</td>
</tr>
<tr>
<td>MLW (T)</td>
<td>192</td>
<td>192</td>
<td>192</td>
<td>192</td>
<td>192</td>
</tr>
<tr>
<td>MZFW (T)</td>
<td>180</td>
<td>181</td>
<td>181</td>
<td>183</td>
<td>183</td>
</tr>
</tbody>
</table>
13. Centre of Gravity Range

Refer to approved Aeroplane Flight Manual.

14. Datum / Mean Aerodynamic Chord (MAC)

Datum: Station 0.0, located 6,382 meters forward of aeroplane nose.
MAC: 7,290m

15. Levelling Means

Three primary jacking points: Refer to approved Weight and Balance Manual.

16. Minimum Flight Crew

Two (2): Pilot and Co-pilot.

17. Passenger Emergency Exit

Two Passenger Emergency Exit configurations:
- Configuration A-A-A-I: Basic 3 Type A passenger doors and 1 Emergency Exit Type I

18. Maximum Passenger Seating Capacity and associated Minimum Number of Cabin Crew

The maximum number of passengers approved for emergency evacuation is:
- 375 Basic

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

The table below provides the certified Maximum Passenger Seating Capacities (MPSC), the corresponding cabin configuration (exit arrangement and modifications) and the associated minimum numbers of cabin crew members used to demonstrate compliance with the certification requirement:

<table>
<thead>
<tr>
<th>Maximum Passenger Seating Capacity (MPSC) &amp; Cabin Configuration</th>
<th>Minimum Cabin crew</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 Configuration A-A-A-A (MOD 40161)</td>
<td>8</td>
</tr>
<tr>
<td>375 Configuration A-A-I-A (Basic)</td>
<td>8</td>
</tr>
</tbody>
</table>

A lower number of cabin crew may be approved by EASA for specific cabin layouts.

19. Maximum Baggage/Cargo Loads

<table>
<thead>
<tr>
<th>Cargo compartment</th>
<th>Maximum load (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward</td>
<td>22861</td>
</tr>
<tr>
<td>Aft</td>
<td>18507</td>
</tr>
<tr>
<td>Rear (bulk)</td>
<td>3468</td>
</tr>
</tbody>
</table>

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weights), see Weight and Balance Manual.
20. Rotor Blade control movement
   N/A

21. Auxiliary Power Unit (APU)
   One GARRETT (Company name changed to Honeywell International Inc. in 1999):
      - GTCP 331-350C (Specification 31-7677A)

22. Life-limited parts
   Refer to Airworthiness Limitation Section
   See SECTION: DATA PERTINENT TO ALL MODELS.

23. Wheels and Tyres
   Refer to Airbus Service Bulletin A340-32-4007.
A340-300 SERIES—Cont’d

IV. Operating and Service Instructions

In accordance with EASA Part 21 regulation, Airbus provide on-demand access to the following technical publications to any person required to comply with any of those instructions:

(Access via AirbusWorld portal)

1. Flight Manual (AFM)
   Ref. AFM 34000 (latest published revision)

   Refer to Customized Maintenance Manuals published by Airbus (latest published revision)

3. Structural Repair Manual (SRM)
   Refer to Customized SRM published by Airbus (latest published revision)

4. Weight and Balance Manual (W&BM)
   Refer to Customized W&BM published by Airbus (latest published revision)

5. Illustrated Parts Catalogue (IPC)
   Refer to Customized IPC published by Airbus (latest published revision)

6. Service Bulletins (SBs)
   Refer to applicability section of Airbus Service Bulletins (latest published revision)

7. Required Equipment
   The equipment required by the applicable regulation shall be installed.
   Refer also to MMEL – See SECTION: DATA PERTINENT TO ALL MODELS.
V. Notes

1. All Weather Capability

<table>
<thead>
<tr>
<th>A/C Model</th>
<th>CFMI Engines</th>
</tr>
</thead>
<tbody>
<tr>
<td>A340-311</td>
<td></td>
</tr>
<tr>
<td>A340-312</td>
<td></td>
</tr>
<tr>
<td>A340-313</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type Design Capability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A340-311</td>
<td></td>
</tr>
<tr>
<td>A340-312</td>
<td></td>
</tr>
<tr>
<td>A340-313</td>
<td>Cat 3 Precision approach and autoland</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option Capability (MOD)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A340-311</td>
<td></td>
</tr>
<tr>
<td>A340-312</td>
<td></td>
</tr>
<tr>
<td>A340-313</td>
<td></td>
</tr>
</tbody>
</table>

2. Conversions between Models

The following A/C Model conversions are approved:


- Conversion of A340-313 into A340-312: A340-313 aircraft can be converted into A340-312 by application of Airbus Service Bulletin: A340-00-4035 (Mod 53452)

The following A/C Model engine configuration changes are approved:

- 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.
3. Change of Weight Variants

N/A

4. Other Notes

- 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.

- A340-313 (Mod 44260)
  When CFM56-5C4/1 engines are installed, the thrust bump can be activated by Mod 44260

- 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“
SECTION 3: A340-600 SERIES

I. General

1. Type / Model
   1.1 Type
       A340
   1.2 Model
       A340-642, A340-643

2. Airworthiness Category
   Large Aeroplanes
   Performance Category A

3. Manufacturer
   AIRBUS
   2 Rond-Point Emile Dewoitine
   31700 Blagnac FRANCE

4. State of Design Authority Type Certification
   4.1 State of Design Authority
       DGAC-F
   4.2 Application Date
       A340-642: 31 December 1997
   4.3. State of Design Authority Type Certificate Date
       A340-642: 21 May 2002
       DGAC-F TC 183 remains a valid reference for models certified before 28 September 2003

5. EASA Type Certification
   5.1 State of Design Authority
       EASA
   5.2 Application Date
       A340-643: 31 December 1997
   5.3. State of Design Authority Type Certificate Date
       A340-643: 11 April 2006
SECTION 2: A340-600 SERIES (Cont’d)

II. Certification Basis

1. Reference Date for determining the applicable requirements

Reference Application Date for EASA Certification: 31 December 1997

2. Airworthiness Requirements

Original Airworthiness Requirements (at time of TC):

- Certification Requirements
  JAR 25 Change 14
  Except JAR 25.365(g) which remains at Change 13 for the design of the cockpit wall.

- All Weather Operations
  JAR AWO change 2 plus:
  - Orange Paper AWO 96/1

Additional Airworthiness Requirements (added post TC):

- Airborne Communication, Navigation, Surveillance
  CS-ACNS Initial Issue
  Note: For compliance to CS-ACNS Subpart B, Section 2, a deviation to CS-ACNS.B.DLS.B1.075 is accepted by CRI ACNS-B-GEN-01 to not include DM89 MONITORING [unit name] [frequency] in the downlink message set installed.
  - Subpart D – for optional modifications installing transponders aiming at answering to SES mandate as defined in (EU) No 1207/2011 and amended by (EU) No 1028/2014 of 26 September 2014.

3. Special Conditions

Original Special Conditions part of Certification Basis (at time of TC):

- JAA Numbering:
  SC A-1001 Revised Loads Requirements (NPA 25C20 and NPA 25C282)
  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 A-1011 Vibration, Buffet and Aeroelastic Requirements (NPA25BCD236)
  SC A-1017 Braked Roll Conditions (NPA 25C-276)
  SC A-1020 Shock Absorption test (NPA 25D-279)
  SC F-1001 Stalling and scheduled operating speeds
  SC F-2 Motion and effects of cockpit controls
  SC F-1003 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 F-1008  Accelerate stop distances
SC F-1014  Flap Gates (NPA 25B238)
SC G-7  Function and Reliability Testing
SC P-1018  Engine Sustained Imbalance
SC P-1020  APU Instruments (NPA 25J246)
SC P-1021  Windmilling without oil (NPA 25E268)
SC P-1022  Falling and Blowing Snow (NPA 25E288)
SC S-10.2  Effects of external radiations 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 S-148  Longitudinal touchdown performance limit and Minimum Approach Break-Off Height (NPA AWO-8, this SC replaces S-48)
SC S-1021  Brakes (partial NPA 25D-291)

Additional Special Conditions part of the Certification Basis (All models, added Post TC):
The following Special Conditions are additionally applicable when an A/C configuration includes
the subject optional design change(s):

- JAA Numbering:
  SC E-2  Crew rest
  (applicable from February 1993)
  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 E-28  Partial Bulk Crew Rest Compartment with attached to galley
  (applicable from January 2009)
  SC E-128  Improved flammability standards for thermal/acoustic insulation
  (applicable from February 2009)
  SC E-130  Application of heat release and smoke density requirements to seat materials
  (applicable from February 2010)
  SC E-1014  HIC compliance for front row seating (inflatable restraints)
  (applicable from July 2007)
  SC E-1023  Side Facing Seats with Inflatable Restraints
  (applicable from December 2005)
  SC F-GEN-01 Installation of non-rechargeable lithium battery
  (applicable by the date of this TCDS EASA.A.015 at issue 25)
  SC H-01  Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS
  (applicable from May 2010)
  SC O-1001  Ferrying one engine unserviceable
  (applicable from Oct 2002)
4. Exemptions

- Temporary exemption (A340-642 only):
  P-1024 ECAM EGT indication (cancelled by modification 50560)

5. Deviations

None

6. Equivalent Safety Findings

Original Equivalent Safety Findings part of Certification Basis (at time of TC):

- JAA Numbering:
  ESF A-1015 Checked Pitching Maneuver Loads
  ESF A-1021 Engine Failure Loads
  ESF A-1023 Continuous Turbulence
  ESF A-1024 Casting Factors
  ESF A-1026 Proof of structure
  ESF S-45 Oil temperature indication
  ESF S-148 Longitudinal touch down performance and Minimum Approach Break-off Height deletion (NPA AWO 8)
  ESF S-1059 Hydraulics System
  ESF S-1065 Packs Off Operation
  ESF S-1066 Excess deviation alert
  ESF S-1070 AFM – Runway Visual Range Limits
  ESF P-1008 Fuel Tank Access Covers
  ESF P-1009 Rolls-Royce Trent 500 Turbine Overheat Detection
  ESF P-1011 Thrust Reverser Testing

The following Special Condition provide an equivalent safety level to JAR 25 accelerate-stop and brakes qualification requirements (NPA 25 B, D, G 244)

- SC F-1008 Accelerate stop distances
- SC F-1014 Flap Gates (NPA 25B238)
- SC S-1021 Brakes (partial NPA 25D-291)

Additional Equivalent Safety Findings part of the Certification Basis (added post TC):
The following Equivalent Safety Findings are additionally applicable when an A/C configuration include the subject optional design change(s):

- **JAA Numbering:**
  - ESF E-15 Reinforced security cockpit door
    (applicable from July 2002)
  - ESF E-17 Trolley Lift
    (applicable from November 2003)
  - ESF E-18 Lower Deck galley compartment
    (applicable from November 2003)
  - ESF E-21 Emergency exit marking reflectance
    (applicable from December 2004)
  - ESF E-27 Forward facing seats over 18 degrees to A/C centreline
    (applicable from June 2009)
  - ESF E-29 Fuselage burn through – aft pressure bulkhead
    (applicable from March 2009)
  - ESF E-30 Fuselage burn through – belly fairing
    (applicable from April 2009)
  - ESF E-31 Fuselage burn through – bilge area
    (applicable from April 2009)
  - ESF E-134 Installation of seats that make an angle of more than 18° with the aircraft longitudinal axis
    (applicable from November 2013)
  - ESF E-1022 Improved flammability standards for thermal/acoustic insulation materials, it provides an equivalent level of safety to JAR 25.853(b)
    (applicable from August 2005)
  - ESF F-128 Minimum Mass Flow of Supplemental Oxygen, it provides an equivalent level of safety to JAR 25.1443(c)
    (applicable from November 2014).
  - ESF F-129 Crew Determination of Quantity of Oxygen in Passenger Oxygen System, it provides an equivalent level of safety to JAR 25.1441(c)
    (applicable from November 2014).

- **EASA Numbering:**
  - ESF D-101 Green arrow and “Open” Placard of Emergency Exit marking, it provides an equivalent level of safety to CS 25.811(e)(4) amdt 3, when the aircraft is equipped with symbolic exit signs (applicable from July 2018).

7. Environmental Protection

Environmental requirements for noise, fuel venting and emissions:

- **Noise:** ICAO Annex 16 – Volume I
  (See EASA TCDSN A.015 for details)
  Note: MOD 55005 originally used for compliance demonstration is not mandatory anymore.

- **Fuel venting and emissions:** ICAO Annex 16 – Volume II

8. Operational Suitability Data (OSD)
See SECTION: DATA PERTINENT TO ALL MODELS for:
- Operational Suitability Requirements
- EASA Approved Operational Suitability Data
SECTION 1: A340-600 SERIES (Cont’d)

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

   With Rolls Royce (RR) engines
   A340-642: EAL 415.0410/02
   A340-643: F00RP0604310

2. Description

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

3. Equipment

   Refer to Type Design Definition.

   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.

4. Dimensions

   - Length: 74,77m (245ft 3in)
   - Diameter: 05,64m (18ft 6in)
   - Wing Span: 63,45m (208ft 2in)
   - Height: 17,29 m (56ft 9in)

5. Engine

   5.1 Model

   Rolls Royce (RR) 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

   5.2 Type Certificate

   Rolls Royce (RR) engines
   CAA UK Engine TCDS: 1056
   EASA Engine TCDS: EASA.E.060
5.3 Limitations

5.3.1 Installed Engine Limits

Rolls Royce (RR) engines

<table>
<thead>
<tr>
<th>A/C Model</th>
<th>Engine Model</th>
<th>Data Sheet EASA.E.060</th>
<th>Static thrust at sea level:</th>
<th>Approved Oils: Refer to the RR Engine Operating Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A340-642</td>
<td>RB211 Trent 556-61</td>
<td>EASA.E.060</td>
<td>58,462 lbs</td>
<td>* 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go-around in accordance with DGAC &quot;Fiche de caractéristiques moteur&quot;).</td>
</tr>
<tr>
<td>A340-643</td>
<td>RB211 Trent 556A2-61</td>
<td></td>
<td>61,902 lbs</td>
<td>Other engine limitations: See the relevant Engine Type Certificate Data Sheet</td>
</tr>
<tr>
<td>A340-642</td>
<td>RB211 Trent 560A2-61</td>
<td></td>
<td>44,359 lbs</td>
<td></td>
</tr>
<tr>
<td>A340-643</td>
<td>RB211 Trent 560A2-61</td>
<td></td>
<td>44,359 lbs</td>
<td></td>
</tr>
</tbody>
</table>

6. Fluids (Fuel / Oil / Additives / Hydraulics)

6.1 Fuel

The following fuels may be used:

<table>
<thead>
<tr>
<th>ENGINES</th>
<th>KEROSENE DESIGNATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR: (Operating Instruction in RR Manuels)</td>
<td>JET A, JET A-1, JP5, JP8, N° 3 Jet Fuel, TS-1(GOST), RT(GOST)</td>
</tr>
</tbody>
</table>

The above mentioned fuels and additives are also suitable for the APU. Refer to Consumable Material List (CML) for details on approved fuel specifications.

6.2 Oil

Refer to the Consumable Material List (CML).

Refer to Engine and APU Manufacturers Operating Instructions.

6.3 Additives

Refer to the Consumable Material List (CML).

See Rolls Royce “RB211 Specific Operating Instructions for Trent 500”, installation manual.

6.4 Hydraulics

Refer to the Consumable Material List (CML).
7. Fluid capacities

7.1 Fuel

Fuel quantity (0.8 kg / litre):

**A340-642 without mod 53000 and without mod 54679**

<table>
<thead>
<tr>
<th></th>
<th>CENTER</th>
<th>WING TANK</th>
<th>TRIM TANK</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Usable fuel liters (kg)</td>
<td>Usable fuel LWW liters (kg)</td>
<td>FCMC before FL 6.0</td>
<td>FCMC before FL 6.0</td>
</tr>
<tr>
<td></td>
<td>55,133* (44,106)</td>
<td>55,133 (44,106)</td>
<td>8,361 (6,689)</td>
<td>194,136 (155,309)</td>
</tr>
<tr>
<td></td>
<td>240* (192)</td>
<td>240 (192)</td>
<td>25 (20)</td>
<td>761 (608)</td>
</tr>
<tr>
<td></td>
<td>Unusable fuel liters (kg)</td>
<td>Usable fuel LWW liters (kg)</td>
<td>FCMC FL 6.0 up to FL 7.0</td>
<td>FCMC FL 6.0 up to FL 7.0</td>
</tr>
<tr>
<td></td>
<td>69,610 (55,688)</td>
<td>69,610 (55,688)</td>
<td>7,986 (6,389)</td>
<td>193,781 (155,825)</td>
</tr>
<tr>
<td></td>
<td>190 (152)</td>
<td>190 (152)</td>
<td>597 (477)</td>
<td>547 (437)</td>
</tr>
<tr>
<td></td>
<td>Unusable fuel LWW liters (kg)</td>
<td></td>
<td>FCMC FL 7.1 onwards</td>
<td>FCMC FL 7.1 onwards</td>
</tr>
<tr>
<td></td>
<td>49,432 (39,546)</td>
<td></td>
<td>7,886 (6,309)</td>
<td>193,825 (155,060)</td>
</tr>
<tr>
<td></td>
<td>44 (35)</td>
<td></td>
<td>7,886 (6,309)</td>
<td>194,681 (155,745)</td>
</tr>
</tbody>
</table>

|                      |                               | Unusable fuel liters (kg)      | 193,925 (155,140)              |                               |
|                      |                               | 193,925 (155,140)              | 547 (437)                      |                               |
|                      |                               |                               | 194,781 (155,825)              |                               |
|                      |                               |                               | 761 (608)                      |                               |
|                      |                               |                               | 194,136 (155,309)              |                               |
|                      |                               |                               | 193,366 (154,929)              |                               |

* 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:

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>FCMC before FL 6.0</th>
<th>FCMC before FL 6.0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>194,136 (155,309)</td>
<td>761 (608)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>193,136 (155,309)</td>
<td>194,781 (155,825)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>193,366 (154,929)</td>
<td>547 (437)</td>
</tr>
</tbody>
</table>

**A340-642 with mod 54679**

A maximum total of 2,800 liters can be added to the values identified in paragraph above 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
A340-642 with mod 53000, A340-643

### 3 - TANK AIRPLANE

<table>
<thead>
<tr>
<th></th>
<th>Usable fuel litres (kg)</th>
<th>Unusable fuel litres (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CENTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outer</td>
<td>12,442 (9,954)</td>
<td>54 (43)</td>
</tr>
<tr>
<td>Total</td>
<td>131,268 (105,014)</td>
<td>330 (264)</td>
</tr>
<tr>
<td><strong>WING TANK</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inner 1 / 4</td>
<td>49,178 (39,342)</td>
<td>56 (45)</td>
</tr>
<tr>
<td>Inner 2 / 3</td>
<td>69,648 (55,718)</td>
<td>220 (176)</td>
</tr>
<tr>
<td>Outer</td>
<td>12,442 (9,954)</td>
<td>54 (43)</td>
</tr>
<tr>
<td>Total</td>
<td>131,268 (105,014)</td>
<td>330 (264)</td>
</tr>
<tr>
<td><strong>TRIM TANK</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>7,886 (6,309)</td>
<td>25 (20)</td>
</tr>
<tr>
<td>Extended</td>
<td>9,509 (7,607)</td>
<td>45 (36)</td>
</tr>
<tr>
<td>(Mod 54382)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Trim Tank</td>
<td>194,356 (155,484)</td>
<td>526 (421)</td>
</tr>
<tr>
<td>Extended Trim Tank (Mod 54382)</td>
<td>195,979 (156,783)</td>
<td>546 (417)</td>
</tr>
</tbody>
</table>

7.2 Oil
Refer to Weight & Balance Manual.

7.3 Coolant system capacity
N/A.

8. Air Speeds Limits
Refer to approved Aeroplane Flight Manual.

9. Rotor Speed Limits
N/A

10. Maximum Operating Altitude and Temperature

10.1 Altitude
Maximum Flight level: 41 450 ft (12 634m)
Maximum Airfield altitude: 12 500 ft (3 810m)

10.2 Temperature
Flight: Minimum: -78°C SAT
Ground: Range: -54°C to +55°C

11. Operating Limitations
Refer to approved Aeroplane Flight Manual for maximum demonstrated crosswind.

Wind Speed Limitations:
- Crosswind: Takeoff: A/C: 35kt (gust included)
  Engine: Refer to AFM Limitation section
  Landing: A/C: 37kt (gust included)
  Engine: Refer to AFM Limitation section
- Tailwind: Takeoff: 10kt
  Landing: 10kt
12. Maximum Weight

Valid for A340-642

<table>
<thead>
<tr>
<th>Variant (MOD)</th>
<th>000 (Basic)</th>
<th>001 (50312)</th>
<th>101 (53043)</th>
<th>102 (54805)</th>
<th>103 (57713)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTOW (T)</td>
<td>365</td>
<td>368</td>
<td>380</td>
<td>368</td>
<td>365</td>
</tr>
<tr>
<td>MLW (T)</td>
<td>256</td>
<td>259</td>
<td>265</td>
<td>259</td>
<td>265</td>
</tr>
<tr>
<td>MZFW (T)</td>
<td>242</td>
<td>245</td>
<td>251</td>
<td>245</td>
<td>251</td>
</tr>
</tbody>
</table>

Valid for A340-643

<table>
<thead>
<tr>
<th>Variant (MOD)</th>
<th>101 (53043)</th>
<th>102 (54805)</th>
<th>103 (57713)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTOW (T)</td>
<td>380</td>
<td>368</td>
<td>365</td>
</tr>
<tr>
<td>MLW (T)</td>
<td>265</td>
<td>259</td>
<td>265</td>
</tr>
<tr>
<td>MZFW (T)</td>
<td>251</td>
<td>245</td>
<td>251</td>
</tr>
</tbody>
</table>

13. Centre of Gravity Range

Refer to approved Aeroplane Flight Manual.

14. Datum / Mean Aerodynamic Chord (MAC)

Datum: Station 0.0, located 6,382 meters forward of aeroplane nose.

MAC: 8,370m

15. Levelling Means

Three primary jacking points: Refer to approved Weight and Balance Manual.

16. Minimum Flight Crew

Two (2): Pilot and Co-pilot.

17. Passenger Emergency Exit

Two Passenger Emergency Exit configurations:
- Configuration A-A-III-A-A: Basic 4 Type A passenger doors and 1 Emergency Exit Type III

18. Maximum Passenger Seating Capacity and associated Minimum Number of Cabin Crew

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.

The table below provides the certified Maximum Passenger Seating Capacities (MPSC), the corresponding cabin configuration (exit arrangement and modifications) and the associated minimum numbers of cabin crew members used to demonstrate compliance with the certification requirement:

<table>
<thead>
<tr>
<th>Maximum Passenger Seating Capacity (MPSC) &amp; Cabin Configuration</th>
<th>Minimum Cabin crew</th>
</tr>
</thead>
<tbody>
<tr>
<td>440</td>
<td>9</td>
</tr>
<tr>
<td>400</td>
<td>8</td>
</tr>
</tbody>
</table>

A lower number of cabin crew may be approved by EASA for specific cabin layouts.
19. Maximum Baggage/ Cargo Loads

<table>
<thead>
<tr>
<th>Cargo compartment</th>
<th>Maximum load (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward</td>
<td>30,482</td>
</tr>
<tr>
<td>Aft</td>
<td>22,861</td>
</tr>
<tr>
<td>Rear (bulk)</td>
<td>3,468</td>
</tr>
</tbody>
</table>

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

20. Rotor Blade control movement

N/A

21. Auxiliary Power Unit (APU)


Oils: refer to applicable approved Manuals

22. Life-limited parts

Refer to Airworthiness Limitation Section

See SECTION: DATA PERTINENT TO ALL MODELS.

23. Wheels and Tyres

Refer to Airbus Service Bulletin
A340-600 SERIES – Cont’d

IV. Operating and Service Instructions

In accordance with EASA Part 21 regulation, Airbus provide on-demand access to the following technical publications to any person required to comply with any of those instructions:

(Access via AirbusWorld portal)

1. Flight Manual (AFM)
   Ref. AFM 34000 (latest published revision)

   Refer to Customized Maintenance Manuals published by Airbus (latest published revision)

3. Structural Repair Manual (SRM)
   Refer to Customized SRM published by Airbus (latest published revision)

4. Weight and Balance Manual (W&BM)
   Refer to Customized W&BM published by Airbus (latest published revision)

5. Illustrated Parts Catalogue (IPC)
   Refer to Customized IPC published by Airbus (latest published revision)

6. Service Bulletins (SBs)
   Refer to applicability section of Airbus Service Bulletins (latest published revision)

7. Required Equipment
   The equipment required by the applicable regulation shall be installed.
   Refer also to MMEL – See SECTION: DATA PERTINENT TO ALL MODELS.
A340-600 SERIES – Cont’d

V. Notes

1. All Weather Capability

<table>
<thead>
<tr>
<th>A/C Model</th>
<th>RR Engines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A340-642</td>
</tr>
<tr>
<td>Type Design Capability</td>
<td>-</td>
</tr>
<tr>
<td>Option Capability (MOD)</td>
<td>Cat 3 Precision approach and autoland (50321)</td>
</tr>
</tbody>
</table>

2. Conversions between Models

The following A/C Model engine configuration changes are approved:

- A340-642
  RB211 Trent 556-61, RB211 Trent 556A2-61 engines can be intermixed on the same aircraft whatever the number or the position.

3. Change of Weight Variants

N/A
SECTION 4: A340-500 SERIES

I. General

1. Type / Model
   1.1 Type
       A340
   1.2 Model
       A340-541, A340-542

2. Airworthiness Category
   Large Aeroplanes
   Performance Category A

3. Manufacturer
   AIRBUS
   2 Rond-Point Emile Dewoitine
   31700 Blagnac FRANCE

4. State of Design Authority Type Certification
   4.1 State of Design Authority
       DGAC-F
   4.2 Application Date
       A340-541: 31 December 1997
   4.3. State of Design Authority Type Certificate Date
       A340-541: 03 December 2002
       DGAC-F TC 183 remains a valid reference for models certified before 28 September 2003

5. EASA Type Certification
   5.1 State of Design Authority
       EASA
   5.2 Application Date
       A340-542: 31 December 1997
   5.3. State of Design Authority Type Certificate Date
       A340-542: 15 February 2007
SECTION 2: A340-600 SERIES (Cont’d)

II. Certification Basis

1. Reference Date for determining the applicable requirements

   Reference Application Date for EASA Certification: 31 December 1997

2. Airworthiness Requirements

   Original Airworthiness Requirements (at time of TC):
   - Certification Requirements
     JAR 25 Change 14
     Except JAR 25.365(g) which remains at Change 13 for the design of the cockpit wall.
   - All Weather Operations
     JAR AWO change 2 plus:
     Orange Paper AWO 96/1

   Additional Airworthiness Requirements (added post TC):
   - Airborne Communication, Navigation, Surveillance
     CS-ACNS Initial Issue
     Note: For compliance to CS-ACNS Subpart B, Section 2, a deviation to CS-ACNS.B.DLS.B1.075 is accepted by CRI ACNS-B-GEN-01 to not include DM89 MONITORING [unit name] [frequency] in the downlink message set installed.
     - Subpart D – for optional modifications installing transponders aiming at answering to SES mandate as defined in (EU) No 1207/2011 and amended by (EU) No 1028/2014 of 26 September 2014.

3. Special Conditions

   Original Special Conditions part of Certification Basis (at time of TC):
   - JAA Numbering:
     SC A-1001 Revised Loads Requirements (NPA 25C20 and NPA 25C282)
     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 A-1011 Vibration, Buffet and Aeroelastic Requirements (NPA25BCD236)
     SC A-1017 Braked Roll Conditions (NPA 25C-276)
     SC A-1020 Shock Absorption test (NPA 25D-279)
     SC F-1001 Stalling and scheduled operating speeds
     SC F-2 Motion and effects of cockpit controls
     SC F-1003 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 F-1008  Accelerate stop distances
SC F-1014  Flap Gates (NPA 25B238)
SC G-7  Function and Reliability Testing
SC P-1016  Rear Centre Tank and Tyre Failure
SC P-1018  Engine Sustained Imbalance
SC P-1020  APU Instruments (NPA 25J246)
SC P-1021  Windmilling without oil (NPA 25E268)
SC P-1022  Falling and Blowing Snow (NPA 25E288)
SC S-10.2  Effects of external radiations 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 S-148  Longitudinal touchdown performance limit and Minimum Approach Break-Off Height (NPA AWO-8, this SC replaces S-48)
SC S-1021  Brakes (partial NPA 25D-291)

Additional Special Conditions part of the Certification Basis (All models, added Post TC):
The following Special Conditions are additionally applicable when an A/C configuration include the subject optional design change(s):

SC E-2  Crew rest
(applicable from February 1993)
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 E-28  Partial Bulk Crew Rest Compartment with attached to galley
(applicable from January 2009)
SC E-128  Improved flammability standards for thermal/acoustic insulation
(applicable from February 2009)
SC E-130  Application of heat release and smoke density requirements to seat materials
(applicable from February 2010)
SC E-1014  HIC compliance for front row seating (inflatable restraints)
(applicable from July 2007)
SC E-1023  Side Facing Seats with Inflatable Restraints
(applicable from December 2005)
SC F-GEN-01  Installation of non-rechargeable lithium battery
(applicable by the date of this TCDS EASA.A.015 at issue 25)
SC H-01  Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS
(applicable from May 2010)
SC O-1001  Ferrying one unserviceable engine
(applicable from Oct 2002)
4. Exemptions

None

5. Deviations

None

6. Equivalent Safety Findings

Original Equivalent Safety Findings part of Certification Basis (at time of TC):

- JAA Numbering:
  - ESF A-1015 Checked Pitching Maneuver Loads
  - ESF A-1021 Engine Failure Loads
  - ESF A-1023 Continuous Turbulence
  - ESF A-1024 Casting Factors
  - ESF A-1026 Proof of structure
  - ESF S-45 Oil temperature indication
  - ESF S-148 Longitudinal touch down performance and Minimum Approach Break-off Height deletion (NPA AWO 8)
  - ESF S-1059 Hydraulics System
  - ESF S-1065 Packs Off Operation
  - ESF S-1066 Excess deviation alert
  - ESF S-1070 AFM – Runway Visual Range Limits
  - ESF P-1008 Fuel Tank Access Covers
  - ESF P-1009 Rolls-Royce Trent 500 Turbine Overheat Detection
  - ESF P-1011 Thrust Reverser Testing

The following Special Condition provide an equivalent safety level to JAR 25 accelerate-stop and brakes qualification requirements (NPA 25 B, D, G 244)

- SC F-1008 Accelerate stop distances
- SC F-1014 Flap Gates (NPA 25B238)
- SC S-1021 Brakes (partial NPA 25D-291)

Additional Equivalent Safety Findings part of the Certification Basis (added post TC):
The following Equivalent Safety Findings are additionally applicable when an A/C configuration include the subject optional design change(s):

- JAA Numbering:
  - ESF E-15  Reinforced security cockpit door (applicable from July 2002)
  - ESF E-17  Trolley Lift (applicable from November 2003)
  - ESF E-18  Lower Deck galley compartment (applicable from November 2003)
  - ESF E-21  Emergency exit marking reflectance (applicable from December 2004)
  - ESF E-27  Forward facing seats over 18 degrees to A/C centreline (applicable from June 2009)
  - ESF E-29  Fuselage burn through – aft pressure bulkhead (applicable from March 2009)
  - ESF E-30  Fuselage burn through – belly fairing (applicable from April 2009)
  - ESF E-31  Fuselage burn through – bilge area (applicable from April 2009)
  - ESF E-134 Installation of seats that make an angle of more than 18° with the aircraft longitudinal axis (applicable from November 2013)
  - ESF E-1022 Improved flammability standards for thermal / acoustic insulation materials, it provides an equivalent level of safety to JAR 25.853(b) (applicable from August 2005)
  - ESF F-128 Minimum Mass Flow of Supplemental Oxygen, it provides an equivalent level of safety to JAR 25.1443(c) (applicable from November 2014).
  - ESF F-129 Crew Determination of Quantity of Oxygen in Passenger Oxygen System, it provides an equivalent level of safety to JAR 25.1441(c) (applicable from November 2014).

- EASA Numbering:
  - ESF D-101  Green arrow and “Open” Placard of Emergency Exit marking, it provides an equivalent level of safety to CS 25.811(e)(4) amdt 3, when the aircraft is equipped with symbolic exit signs (applicable from July 2018).

7. Environmental Protection

Environmental requirements for noise, fuel venting and emissions:

- **Noise:** ICAO Annex 16 – Volume I
  (See EASA TCDSN A.015 for details)
  Note: MOD 55005 originally used for compliance demonstration is not mandatory anymore.

- **Fuel venting and emissions:** ICAO Annex 16 – Volume II

8. Operational Suitability Data (OSD)
See SECTION: DATA PERTINENT TO ALL MODELS for:
- Operational Suitability Requirements
- EASA Approved Operational Suitability Data
SECTION 1: A340-500 SERIES (Cont’d)

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

With Rolls Royce (RR) engines
A340-541: EAL 415.1094/02
A340-542: EAL F01M06010396

2. Description

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

3. Equipment

Refer to Type Design Definition.

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.

4. Dimensions

- Length: 67,33m (220ft 11in)
- Diameter: 05,64m (18ft 6in)
- Wing Span: 63,45m (208ft 2in)
- Height: 17,11 m (56ft 1in)

5. Engine

5.1 Model

Rolls Royce (RR) 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

5.2 Type Certificate

Rolls Royce (RR) engines
CAA UK Engine TCDS: 1056
EASA Engine TCDS: EASA.E.060
5.3 Limitations

5.3.1 Installed Engine Limits

Rolls Royce (RR) engines

<table>
<thead>
<tr>
<th>A/C Model</th>
<th>Engine Model</th>
<th>Data Sheet EASA.E.060</th>
<th>Static thrust at sea level:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RB211 Trent 553-61</td>
<td></td>
<td>- take-off (5mn)* 55,780 lbs 58,462 lbs</td>
</tr>
<tr>
<td></td>
<td>RB211 Trent 553A2-61</td>
<td></td>
<td>- maximum continuous 44,359 lbs 44,359 lbs</td>
</tr>
</tbody>
</table>

* 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.

6. Fluids (Fuel / Oil / Additives / Hydraulics)

6.1 Fuel

The following fuels may be used:

<table>
<thead>
<tr>
<th>ENGINES</th>
<th>KEROSENE DESIGNATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR: (Operating Instruction in RR Manuels)</td>
<td>JET A, JET A-1, JP5, JP8, N° 3 Jet Fuel, TS-1(GOST), RT(GOST)</td>
</tr>
</tbody>
</table>

The above mentioned fuels and additives are also suitable for the APU. Refer to Consumable Material List (CML) for details on approved fuel specifications.

6.2 Oil

Refer to the Consumable Material List (CML).
Refer to Engine and APU Manufacturers Operating Instructions.

6.3 Additives

Refer to the Consumable Material List (CML).
See Rolls Royce “RB211 Specific Operating Instructions for Trent 500”, installation manual.

6.4 Hydraulics

Refer to the Consumable Material List (CML).
7. Fluid capacities

7.1 Fuel

Fuel quantity (0.8 kg / litre):

A340-541 without mod 53000

<table>
<thead>
<tr>
<th>3 – TANK AIRPLANE</th>
<th>3 – TANK AIRPLANE WITH OPTIONAL ACTs MOD 48487</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable fuel liters (kg)</td>
<td>Usable fuel LWW liters (kg)</td>
</tr>
<tr>
<td>CENTER</td>
<td>55,133 (44,106)</td>
</tr>
<tr>
<td>WING TANK</td>
<td></td>
</tr>
<tr>
<td>Inner 1/4</td>
<td>49,002 (39,201)</td>
</tr>
<tr>
<td>Inner 2/3</td>
<td>69,514 (55,611)</td>
</tr>
<tr>
<td>Outer</td>
<td>12,290 (9,832)</td>
</tr>
<tr>
<td>Total</td>
<td>130,806 (104,645)</td>
</tr>
<tr>
<td>REAR CENTER 5 FRAME</td>
<td></td>
</tr>
<tr>
<td>Without liner (Mod 51344)</td>
<td>19,873 (15,898)</td>
</tr>
<tr>
<td>With liner (Mod 51344)</td>
<td>19,741 (15,793)</td>
</tr>
<tr>
<td>REAR CENTER 7 FRAME</td>
<td></td>
</tr>
<tr>
<td>TRIM TANK</td>
<td></td>
</tr>
<tr>
<td>FCMC FL 7.1 onwards</td>
<td>7,886 (6,309)</td>
</tr>
<tr>
<td>TOTAL (with RCT 5 Frame)</td>
<td>213,698 (170,958)</td>
</tr>
<tr>
<td>Without liner (Mod 51344)</td>
<td>213,566 (170,958)</td>
</tr>
<tr>
<td>With liner (Mod 51344)</td>
<td></td>
</tr>
<tr>
<td>TOTAL (with RCT 7 Frame)</td>
<td>222,010 (177,608)</td>
</tr>
</tbody>
</table>

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).

A340-541 with mod 53000, A340-542

<table>
<thead>
<tr>
<th>3 – TANK AIRPLANE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable fuel liters (kg)</td>
</tr>
<tr>
<td>CENTER</td>
</tr>
<tr>
<td>WING TANK</td>
</tr>
<tr>
<td>Inner 1/4</td>
</tr>
<tr>
<td>Inner 2/3</td>
</tr>
<tr>
<td>Outer</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>REAR CENTER 5 FRAME</td>
</tr>
<tr>
<td>With liner (Mod 51344)</td>
</tr>
<tr>
<td>TRIM TANK</td>
</tr>
<tr>
<td>Extended</td>
</tr>
<tr>
<td>TOTAL (with Extended trim tank and RCT 5 Frame)</td>
</tr>
</tbody>
</table>
7.2 Oil
Refer to Weight & Balance Manual.

7.3 Coolant system capacity
N/A.

8. Air Speeds Limits
Refer to approved Aeroplane Flight Manual.

9. Rotor Speed Limits
N/A

10. Maximum Operating Altitude and Temperature

10.1 Altitude
Maximum Flight level: 41 450 ft (12 634m)
Maximum Airfield altitude: 12 500 ft (3 810m)

10.2 Temperature
Flight: Minimum: -78°C SAT
Ground: Range: -54°C to +55°C

11. Operating Limitations
Refer to approved Aeroplane Flight Manual for maximum demonstrated crosswind.

Wind Speed Limitations:
- Crosswind: Takeoff: A/C: 35kt (gust included)
  Engine: Refer to AFM Limitation section
  Landing: A/C: 37kt (gust included)
  Engine: Refer to AFM Limitation section
- Tailwind: Takeoff: 10kt
  Landing: 10kt

12. Maximum Weight
Valid for A340-541

<table>
<thead>
<tr>
<th>Variant (MOD)</th>
<th>000 (51000)</th>
<th>001 (51080)</th>
<th>002 (50791)</th>
<th>003* (54237)</th>
<th>004* (56719)</th>
<th>101 (53039)</th>
<th>102 (54806)</th>
<th>103 (55642)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTOW (T)</td>
<td>368</td>
<td>372</td>
<td>372</td>
<td>374</td>
<td>374</td>
<td>380</td>
<td>372</td>
<td>372</td>
</tr>
<tr>
<td>MLW (T)</td>
<td>240</td>
<td>243</td>
<td>243</td>
<td>231</td>
<td>243</td>
<td>246</td>
<td>243</td>
<td>246</td>
</tr>
<tr>
<td>MZFW (T)</td>
<td>225</td>
<td>230</td>
<td>230</td>
<td>218</td>
<td>218</td>
<td>232</td>
<td>230</td>
<td>232</td>
</tr>
</tbody>
</table>

(*)WV003 and WV004 are only certified for those aircraft equipped with the Light Weight Wings and the 7-frame RCT.
Valid for A340-542

<table>
<thead>
<tr>
<th>Variant</th>
<th>101 (53039)</th>
<th>102 (54806)</th>
<th>103 (55642)</th>
</tr>
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<tr>
<td>MTOW (T)</td>
<td>380</td>
<td>372</td>
<td>372</td>
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<tr>
<td>MLW (T)</td>
<td>246</td>
<td>243</td>
<td>246</td>
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<tr>
<td>MZFW (T)</td>
<td>232</td>
<td>230</td>
<td>232</td>
</tr>
</tbody>
</table>

13. Centre of Gravity Range
Refer to approved Aeroplane Flight Manual.

14. Datum / Mean Aerodynamic Chord (MAC)
Datum: Station 0.0, located 6,382 meters forward of aeroplane nose.
MAC: 8,370m

15. Levelling Means
Three primary jacking points: Refer to approved Weight and Balance Manual.

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

17. Passenger Emergency Exit
Two Passenger Emergency Exit configurations:
- Configuration A-A-I-A: Basic 3 Type A passenger doors and 1 Emergency Exit Type I

18. Maximum Passenger Seating Capacity and associated Minimum Number of Cabin Crew
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.
The table below provides the certified Maximum Passenger Seating Capacities (MPSC), the corresponding cabin configuration (exit arrangement and modifications) and the associated minimum numbers of cabin crew members used to demonstrate compliance with the certification requirement:

<table>
<thead>
<tr>
<th>Maximum Passenger Seating Capacity (MPSC) &amp; Cabin Configuration</th>
<th>Minimum Cabin crew</th>
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</thead>
<tbody>
<tr>
<td>375</td>
<td>8</td>
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</tbody>
</table>

A lower number of cabin crew may be approved by EASA for specific cabin layouts.

19. Maximum Baggage/Cargo Loads

<table>
<thead>
<tr>
<th>Cargo compartment</th>
<th>Maximum load (kg)</th>
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</thead>
<tbody>
<tr>
<td>Forward</td>
<td>24,494</td>
</tr>
<tr>
<td>Aft</td>
<td>16,330</td>
</tr>
<tr>
<td>Rear (bulk)</td>
<td>3,458</td>
</tr>
</tbody>
</table>

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weights), see Weight and Balance Manual.
20. Rotor Blade control movement
   N/A

21. Auxiliary Power Unit (APU)
   Oils: refer to applicable approved Manuals

22. Life-limited parts
   Refer to Airworthiness Limitation Section
   See SECTION: DATA PERTINENT TO ALL MODELS.

23. Wheels and Tyres
   Refer to Airbus Service Bulletin
IV. Operating and Service Instructions

In accordance with EASA Part 21 regulation, Airbus provide on-demand access to the following technical publications to any person required to comply with any of those instructions:

(Access via AirbusWorld portal)

1. Flight Manual (AFM)
   Ref. AFM 34000 (latest published revision)

   Refer to Customized Maintenance Manuals published by Airbus (latest published revision)

3. Structural Repair Manual (SRM)
   Refer to Customized SRM published by Airbus (latest published revision)

4. Weight and Balance Manual (W&BM)
   Refer to Customized W&BM published by Airbus (latest published revision)

5. Illustrated Parts Catalogue (IPC)
   Refer to Customized IPC published by Airbus (latest published revision)

6. Service Bulletins (SBs)
   Refer to applicability section of Airbus Service Bulletins (latest published revision)

7. Required Equipment
   The equipment required by the applicable regulation shall be installed.
   Refer also to MMEL – See SECTION: DATA PERTINENT TO ALL MODELS.
A340-500 SERIES – Cont’d

V. Notes

1. All Weather Capability

<table>
<thead>
<tr>
<th>A/C Model</th>
<th>RR Engines</th>
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<tbody>
<tr>
<td></td>
<td>A340-541</td>
</tr>
<tr>
<td>Type Design Capability</td>
<td>-</td>
</tr>
<tr>
<td>Option Capability (MOD)</td>
<td>Cat 3 Precision approach and autoland (51315)</td>
</tr>
</tbody>
</table>

2. Conversions between Models

The following A/C Model engine configuration changes are approved:

- 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)

The following A/C Model engine configuration changes are approved:

- A340-541
  RB211 Trent 553-61, RB211 Trent 553A2-61 engines can be intermixed on the same aircraft whatever the number or the position.
SECTION 5: DATA PERTINENT TO ALL MODELS

The below information is applicable to all models unless specifically mentioned:

1. Maintenance Instructions and Airworthiness Limitations

The following initial minimum maintenance requirements and their frequencies shall be used in the development of an approved maintenance programme for the aircraft:

Applicable Document Reference:
- A340 Maintenance Review Board Report (latest published revision)

The following Airworthiness Limitations Sections (ALS) apply:

- **ALS PART 1: SAFE LIFE AIRWORTHINESS LIMITATION ITEMS (SL ALI)**
  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;
  Applicable Document Reference:
  - Ref: A340 ALS Part 1 (latest published revision)
  - Ref: A340 ALS Part 1 Variations (latest published set of variations)

- **ALS PART 2: DAMAGE TOLERANCE AIRWORTHINESS LIMITATION ITEMS (DT ALI)**
  Limitations applicable to Damage Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) Part 2 approved by EASA;
  Applicable Document Reference:
  - Ref: A340 ALS Part 2 (latest published revision)
  - Ref: A340 ALS Part 2 Variations (latest published set of variations)

- **ALS PART 3: CERTIFICATION MAINTENANCE REQUIREMENTS (CMR)**
  Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA;
  Applicable Document Reference:
  - Ref: A340 ALS Part 3 (latest published revision)
  - Ref: A340 ALS Part 3 Variations (latest published set of variations)

- **ALS PART 4: AGEING SYSTEMS MAINTENANCE (ASM)**
  Limitations applicable to Ageing System Maintenance are provided in the A340 Airworthiness Limitation Section (ALS) Part 4 approved by EASA;
  Applicable Document Reference:
  - Ref: A340 ALS Part 4 (latest published revision)
  - Ref: A340 ALS Part 4 Variations (latest published set of variations)

- **ALS PART 5: FUEL AIRWORTHINESS LIMITATIONS (FAL)**
  Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5 approved by EASA;
  Applicable Document Reference:
  - Ref: A340 ALS Part 5 (latest published revision)
  - Ref: A340 ALS Part 5 Variations (latest published set of variations)
2. Operational Suitability Data (OSD)

The Operational Suitability Requirements and Data listed below are applicable to all A340 models:

2.1 Flight Crew Data (FCD)

- Operational Suitability Requirements:
  CS-FCD Initial Issue

- Operational Suitability Data approved by EASA:
  a. FCD ref. F01RP1536752 Issue 1 dated 7\textsuperscript{th} of December 2015 or later approved revisions
  b. Required for Entry into Service by EU operator

2.2 Cabin Crew Data (CCD)

- Operational Suitability Requirements:
  SC A-01-CCD OSD Cabin Crew Data (CCD) Certification Basis
  SC CCD-01 OSD Changes to A340 Cabin Crew Data

- Operational Suitability Data approved by EASA:
  a. CCD ref. LR01RP1534111 Issue 1 dated 16\textsuperscript{th} November 2015 or later approved revisions
  b. Required for Entry into Service by EU operator
  c. A340-200 and A340-300 are one aircraft type.
     A340-500 and A340-600 are variants of the A340-200 and A340-300.

2.3 Master Minimum Equipment List (MMEL)

- Operational Suitability Requirements:
  JAR MMEL/ MEL Subpart B amendment 1

- Operational Suitability Data approved by EASA:
  a. MMEL Ref. MMEL STL 33100 Revision November 2015 or later approved revisions
  b. Required for Entry into Service by EU operator
SECTION 6: ADMINISTRATIVE

I. Acronyms and Abbreviations

<table>
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<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>A/C</td>
<td>Aircraft</td>
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<tr>
<td>AFM</td>
<td>Aeroplane Flight Manual</td>
</tr>
<tr>
<td>ALS</td>
<td>Airworthiness Limitation Section</td>
</tr>
<tr>
<td>AMC</td>
<td>Acceptable Means of Compliance</td>
</tr>
<tr>
<td>APU</td>
<td>Auxiliary Power Unit</td>
</tr>
<tr>
<td>AWO</td>
<td>All Weather Operations</td>
</tr>
<tr>
<td>CAA</td>
<td>Civil Aviation Authority</td>
</tr>
<tr>
<td>CCD</td>
<td>Cabin Crew Data</td>
</tr>
<tr>
<td>CRI</td>
<td>Certification Review Item</td>
</tr>
<tr>
<td>CS</td>
<td>Certification Specification</td>
</tr>
<tr>
<td>DGAC</td>
<td>Direction Générale de l’Aviation Civile (French NAA)</td>
</tr>
<tr>
<td>EASA</td>
<td>European Aviation Safety Agency</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>EIS</td>
<td>Entry Into Service</td>
</tr>
<tr>
<td>ESF</td>
<td>Equivalent Safety Finding</td>
</tr>
<tr>
<td>ETOPS</td>
<td>Extended Range Operations (with Two-Engined Aeroplanes)</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EU MS</td>
<td>European Union Member States</td>
</tr>
<tr>
<td>EWIS</td>
<td>Electrical Wiring Interconnection System</td>
</tr>
<tr>
<td>FCD</td>
<td>Flight Crew Data</td>
</tr>
<tr>
<td>FAA</td>
<td>Federal Aviation Administration</td>
</tr>
<tr>
<td>FAR</td>
<td>Federal Aviation Regulation</td>
</tr>
<tr>
<td>FRS</td>
<td>Flammability Reduction Systems</td>
</tr>
<tr>
<td>ICA</td>
<td>Instructions for Continued Airworthiness</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>JAA</td>
<td>Joint Aviation Authorities</td>
</tr>
<tr>
<td>JAR</td>
<td>Joint Aviation Requirements</td>
</tr>
<tr>
<td>MSN</td>
<td>Manufacturer Serial Number</td>
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<tr>
<td>MMEL</td>
<td>Master Minimum Equipment List</td>
</tr>
<tr>
<td>MLW</td>
<td>Maximum Landing Weight</td>
</tr>
<tr>
<td>MTOW</td>
<td>Maximum Take-Off Weight</td>
</tr>
<tr>
<td>MZFW</td>
<td>Maximum Zero Fuel Weight</td>
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<tr>
<td>NAA</td>
<td>National Aviation Authority</td>
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<td>NPA</td>
<td>Notice of Proposed Amendment</td>
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<td>OSD</td>
<td>Operational Suitability Data</td>
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<tr>
<td>SB</td>
<td>Service Bulletin</td>
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<td>SC</td>
<td>Special Condition</td>
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<td>TC</td>
<td>Type Certificate</td>
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<tr>
<td>TCDS</td>
<td>Type Certificate Data Sheet</td>
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<td>TCDSN</td>
<td>Type Certificate Data Sheet for Noise</td>
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<tr>
<td>WV</td>
<td>Weight Variant</td>
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II. Type Certificate Holder Record

AIRBUS
2 Rond-Point Emile Dewoitine
31700 Blagnac
France

III. Change Record

Starting from issue 17

<table>
<thead>
<tr>
<th>TCDS Issue No</th>
<th>TCDS Date</th>
<th>TCDS Changes</th>
<th>TC Date</th>
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| 17            | 27/11/09  | Page 10 Section 2.III.1.7
Amended engine intermix applicability for A340-213 (deletion of CFM56-5C4/1P)
Page 13 Section 2.III.2.12
Introduction of reference to ALS 4, and deletion of Certification Document reference numbers
Page 18 Section 3.III.1.7
Amended engine intermix applicability for A340-313 (deletion of CFM56-5C4/1P)
Page 21 Section 3.III.2.12
Introduction of reference to ALS 4, and deletion of Certification Document reference numbers
Page 24 Section 4.III.1.2.1
Introduction of reference to Approved Oil documentation
Page 27 Section 4.III.2.1.3
Amended fuel tank capacity values
Page 28 Section 4.III 2.12
Introduction of reference to ALS 4, and deletion of Certification Document reference numbers
Page 31 Section 5.III.1.2.1
Introduction of reference to Approved Oil documentation
Page 32 Section 5.III 1.6
Mod number corrected (Variant 103)
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
Page 33 Section 5.III.2.1.2
Amended fuel tank capacity values
Page 35 Section 5.III.2.12
Introduction of reference to ALS 4, and deletion of Certification Document reference numbers
Page 36 Section 6. Introduction of Change Record |
|               |           | 15/02/07     |
| 18            | 11/05/10  | Update §2.1 – Fuel quantity for A340-300 |
Introduction of MOD 200118 for A340-313 |
Update of § Environmental Standards for all models |
|               |           | 15/02/07     |
| 19            | 11/06/10  | Addition of CRI H-01 as Special Condition (Enhanced Airworthiness Programme for Aeroplane Systems - ICA for EWIS) |
Typo error in the fuel quantity table for A340-642 §2.1.1 |
|               |           | 15/02/07     |
| 20            | 21/10/10  | Correction of Special Condition numbers and titles in Section 4.II.4, 4.II.6, 5.II.4 and 5.II.6. |
Deletion of SC P-1016 from Section 4.II.4 |
<p>|               |           | 15/02/07     |</p>
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<th>TCDS Changes</th>
<th>TC Date</th>
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<tr>
<td>21</td>
<td>20/11/12</td>
<td>Addition of Special Condition P-27, E-128, E-130 and E-1014 to Certification Basis of A340-200/-300/-600/500 Addion of Equivalent Safety Finding E-1022 to Certification Basis of A340-200/-300/-600/500 Correction of Fuel Quantity mod validity in Section 3.III.2.1.1 Introduction of Mod 202897 in Fuel Quantity table of Section 3.III.2.1.3</td>
<td>15/02/07</td>
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<td>23</td>
<td>07/11/17</td>
<td>Change in the Airbus mail address</td>
<td>15/02/07</td>
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<td>24</td>
<td>20/07/18</td>
<td>Introduction of ESF D-101 Green Arrow and &quot;Open&quot; Placard for Emergency Exit Marking</td>
<td>09/04/10</td>
</tr>
<tr>
<td>25</td>
<td>04/07/19</td>
<td>FULL REVISION Full rework of TCDS to match latest EASA TCDS Template and harmonize with A330 TCDS when relevant. Simultaneous release of full Annex to TCDS detailing SC / ESF The following remarkable omissions / typo is corrected vs. previous versions: A340-200/-300 - §II-3: Addition of SC P-32 A340-500/-600 - §II-3: Addition of SC E-1023 A340-200/-300/-600/500 - §II-3: Addition of SC E-28 A340-200/-300/-600/500 - §II-3: Addition of SC D-100, D-102, F-126, F-131, F-137 A340-200/-300/-600/500 - §II-6: Addition of ESF E-21, E-27, E-29, E-30, E-31, E-134 DATA PERTINENT TO ALL MODELS - §2.2: addition of Special Condition for change to OSD: SC CCD-01 OSD Simultaneous release of full Annex to TCDS detailing SC / ESF In addition, as compared to previous versions the following changes are introduced: A340-200/-300/-500/-600 - §II-2: Elect to Comply to CS-ACNS Subpart B, Section 2 and Subpart D for optional modifications answering SES mandates - §III-3: New SC F-GEN-01: Installation of non-rechargeable lithium battery</td>
<td>09/04/10</td>
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