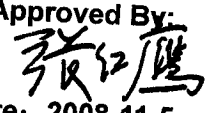


# 型号认可证数据单 THE VALIDATION DATA SHEET

编号/No: VTC0058A  
 版次/Revision: 1  
 型号/Type:  
 A340-211  
 A340-212  
 A340-213  
 A340-311  
 A340-312  
 A340-313  
 A340-541  
 A340-542  
 A340-642  
 A340-643  
 批准人/Approved By:  
  
 日期/Date: 2008-11-5

本数据单是型号认可证(编号: VTC0058A )的组成部分, 它规定了符合中国民用航空总局的适航要求所颁发此型号认可证的产品状态和限制。

This data sheet, which is part of Validation of Type Certificate (No: VTC0058A ) , prescribes condition and limitation under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号认可证持有人/Validation of Type Certificate Holder:

**AIRBUS**  
 1 Rond-point Maurice Bellonte  
 31707 BLAGNAC - FRANCE

有效页清单/List of effective pages :

|             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 页数/ Pages   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 版次/Revision | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| 页数/ Pages   | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 版次/Revision | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| 页数/ Pages   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 版次/Revision | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |    |    |    |    |

# 第 1 部分 概述（所有机型）

## SECTION 1 GENERAL (ALL MODELS)

### 1. CAAC 认可数据单和型号合格证数据单

#### CAAC Validation Data Sheet and Type Certificate Data Sheet

|               | 中国民用航空总局认可数据单号、版次和颁发日期<br>CAAC Validation Data Sheet Number, Revision and issuance date | 型号合格证数据单号、版次和颁发日期<br>Type Certificate Data Sheet Number, Revision and issuance date |
|---------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 当前<br>Current | VTC0058A, 1, xxxx                                                                       | EASA TCDS A.015, Issue 12, 27 March 2007                                            |
| 历史<br>History | VTC058A, 0, 2003.04.21                                                                  | DGAC No.183                                                                         |
|               |                                                                                         |                                                                                     |

2. 类别/Category: 运输类飞机/Transport Airplanes

3. 认可当局/Validation Authority: 欧洲航空安全局/EASA

审定当局/Certifying Authority: 中国民用航空总局/CAAC

4. 型号合格证持有人/Type Certificate Holder:

**AIRBUS**

1 Rond-point Maurice Bellonte  
31707 BLAGNAC - FRANCE

### 5. CAAC Special Requirements:

交付到中国的每一 AAA 航空器须满足下述特殊要求:

Each of AAA aircraft delivered to China shall meet the following special requirements:

(1) 必须满足中国民用航空总局的运行要求（例如标记标牌的中文要求）。The operational requirements of CAAC must be met (e.g. Chinese language requirements for markings and placards).

(2) 燃油符合“中国国标 3 号燃油—GB6537-94”的规范。Fuel conforming to Specification “PRC National Standard No.3 Jet Fuel -- GB6537-94”

(3) 在每一航空器上必须安装快速存储器（QAR）（参照中国适航指令 CAD-97-MULT-38）。Quick Access Recorder (QAR) must be installed on each aircraft (reference to CAD97-MULT-38).

### 6. 认可型别见数据单首页 / Validated Models refer to Page 1 of the VTCDS

注: 安装在 A340-211 上的发动机 CFM56-5C2 or CFM56-5C2/4 or CFM56-5C2/F or CFM56-5C2/F4 or CFM56-5C2/G4 or CFM56-5C2/P 尚未被 CAAC 认可

Note: Engine CFM56-5C2 or CFM56-5C2/4 or CFM56-5C2/F or CFM56-5C2/F4 or CFM56-5C2/G4 or CFM56-5C2/P installed on A340-211 has NOT validated by CAAC

注: 安装在 A340-212 上的发动机 CFM56-5C3/F or CFM56-5C3/F4 or CFM56-5C3/G4 or CFM56-5C3/P 尚未被 CAAC 认可

Note: Engine CFM56-5C3/F or CFM56-5C3/F4 or CFM56-5C3/G4 or CFM56-5C3/P installed on A340-212 has NOT validated by CAAC

注: 安装在 A340-213 上的发动机 CFM56-5C4/1 or CFM56-5C4/P or CFM56-5C4/1P 尚未被 CAAC

认可

Note: Engine CFM56-5C4/1 or CFM56-5C4/P or CFM56-5C4/1P installed on A340-213 has NOT validated by CAAC

注：安装在 A340-311 上的发动机 CFM56-5C2 or CFM56-5C2/4 or CFM56-5C2/F or CFM56-5C2/F4 or CFM56-5C2/G4 or CFM56-5C2/P 尚未被 CAAC 认可

Note: Engine CFM56-5C2 or CFM56-5C2/4 or CFM56-5C2/F or CFM56-5C2/F4 or CFM56-5C2/G4 or CFM56-5C2/P installed on A340-311 has NOT validated by CAAC

注：安装在 A340-312 上的发动机 CFM56-5C3/F or CFM56-5C3/F4 or CFM56-5C3/G4 or CFM56-5C3/P 尚未被 CAAC 认可

Note: Engine CFM56-5C3/F or CFM56-5C3/F4 or CFM56-5C3/G4 or CFM56-5C3/P installed on A340-312 has NOT validated by CAAC

注：安装在 A340-313 上的发动机 CFM56-5C4/1 or CFM56-5C4/P or CFM56-5C4/1P 尚未被 CAAC 认可

Note: Engine CFM56-5C4/1 or CFM56-5C4/P or CFM56-5C4/1P installed on A340-313 has NOT validated by CAAC

注：安装在 A340-642 上的发动机 Rolls Royce RB211 Trent 556A2-61 尚未被 CAAC 认可

Note: Engine RB211 Trent 556A2-61 installed on A340-642 has NOT validated by CAAC

注：安装在 A340-643 上的发动机 Rolls Royce RB211 Trent 560A2-61 尚未被 CAAC 认可

Note: Engine Rolls Royce RB211 Trent 560A2-61 installed on A340-643 has NOT validated by CAAC

注：安装在 A340-541 上的发动机 RB211 Trent 553A2-61 尚未被 CAAC 认可

Note: Engine RB211 Trent 553A2-61 installed on A340-541 has NOT validated by CAAC

注：安装在 A340-542 上的发动机 Rolls Royce RB211 Trent 556A2-61 尚未被 CAAC 认可

Note: Engine Rolls Royce RB211 Trent 556A2-61 installed on A340-542 has NOT validated by CAAC

## 第 2 部分

## SECTION 2

### 第二节:A340-200 系列 / SECTION 2: A340-200 SERIES

#### I. 概述 / General

##### 1. 飞机 / Aeroplane:

#### II. 认可审定基础/ Validation Basis

##### 1.认可审定基础/ Validation Basis

##### 2. EASA 审查参考的申请日期/ Reference Application Date for EASA Certification:

##### 3. EASA 审定日期(JAA 建议)/ EASA Certification Date (JAA recommendation):

##### 4. EASA 审定基础 / EASA Certification Basis:

##### 5. 专用条件/Special Conditions:

##### 6. 等效安全/Equivalent Safety Findings:

##### 7. 环境标准/Environmental Standards:

##### 8. A340-213 Weight Variant 021 only:

#### III. 技术特性和运行限制/Technical Characteristics and Operational Limitations

##### 1. A340-200 装 CFMI 发动机/A340-200 powered by CFMI engines

##### 1.1 型号设计定义 /Type Design Definition:

##### 1.2 发动机 /Engines:

##### 1.2.1 发动机限制/Engine Limits:

##### 1.3 燃油 /Fuel

##### 1.4 限制速度 /Limit Speeds

##### 1.5 重心范围 /Centre of Gravity Range

##### 1.6 最大审定重量 /Maximum Certified Weights

##### 1.7 注 Notes

##### 2. 适用于所有 A340-200 系列的数据 / Data pertinent to all A340-200 series

##### 2.1 燃油量 (0.8 千克/升) /Fuel quantity (0.8 kg/liter) :

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

##### 2.1.2A340-213 Weight Variant 021 and on

##### 2.2 最小飞行机组 / Minimum Flight Crew:

##### 2.3 最大座椅布局数量 /Maximum Seating Capacity

##### 2.4 货舱载荷 / Cargo compartment loading

##### 2.5 环境飞行包线 Environmental Flight Envelope

##### 2.6 其它限制 / Other Limitations

##### 2.7.辅助动力装置(APU) / Auxiliary Power Unit (APU)

##### 2.8.设备 / Equipment

##### 2.9 全部气象能力 / All Weather Capabilities

##### 2.10 机轮和轮胎 / Wheels and Tyres

##### 2.11 液压 / Hydraulics

##### 2.12 维护要求和适航限制 / Maintenance Instructions and Airworthiness Limitations

### 第三节:A340-300 系列 / SECTION 3: A340-300 SERIES

#### I. 概述 /General

##### 1. 飞机/Aeroplane:

#### II.认可审定基础/ Validation Basis

##### 1.认可审定基础/ Validation Basis

##### 2. EASA 审查参考的申请日期/ Reference Application Date for EASA Certification:

##### 3. EASA 审定日期(JAA 建议)/ EASA Certification Date (JAA recommendation):

##### 4. EASA 审定基础 / EASA Certification Basis:

##### 5. 专用条件/Special Conditions:

##### 6. 等效安全/Equivalent Safety Findings:

- 7. 环境标准/Environmental Standards:
- 8. A340-313 Weight Variants 020, 021, 024, 026, 027 and 28 only:

### III. 技术特性和运行限制/Technical Characteristics and Operational Limitations

- 1. A340-300 装 CFMI 发动机/A340-300 powered by CFMI engines
  - 1.1 型号设计定义 /Type Design Definition:
  - 1.2 发动机 /Engines:
    - 1.2.1 发动机限制/Engine Limits:
  - 1.3 燃油 /Fuel
  - 1.4 限制速度 /Limit Speeds
  - 1.5 重心范围 /Centre of Gravity Range
  - 1.6 最大审定重量 /Maximum Certified Weights
  - 1.7 注 Notes
- 2. 适用于所有 A340-300 系列的数据 / Data pertinent to all A340-300 series
  - 2.1 燃油量 (0.8 千克/升) /Fuel quantity (0.8 kg/liter) :
    - 2.1.1 A340-311, A340-312 (except for Weight Variant 029: see § 2.1.2) and A340-313 without mod 49428
    - 2.1.2 A340-313 Weight Variant 020 without mod 49428 and A340-312 Weight Variant 02919
    - 2.1.3 A340-313 Weight Variant 020 with mod 49428
  - 2.2 最小飞行机组 / Minimum Flight Crew:
  - 2.3 最大座椅布局数量 /Maximum Seating Capacity
  - 2.4 货舱载荷 / Cargo compartment loading
  - 2.5 环境飞行包线 Environmental Flight Envelope
  - 2.6 其它限制 / Other Limitations
  - 2.7.辅助动力装置(APU) / Auxiliary Power Unit (APU)
  - 2.8.设备 / Equipment
  - 2.9 全部气象能力 / All Weather Capabilities
  - 2.10 机轮和轮胎 / Wheels and Tyres
  - 2.11 液压 / Hydraulics
  - 2.12 维护要求和适航限制 / Maintenance Instructions and Airworthiness Limitations

### 第四节:A340-600 系列/SECTION 4: A340-600 SERIES

#### I. 概述 /General

##### 1.飞机/Aeroplane:

#### II. 认可审定基础/ Validation Basis

- 1.认可审定基础/ Validation Basis
- 2. EASA 审查参考的申请日期/ Reference Application Date for EASA Certification:
- 3. EASA 审定日期(JAA 建议)/ EASA Certification Date (JAA recommendation):
- 4. EASA 审定基础 / EASA Certification Basis:
- 5. 专用条件/Special Conditions:
- 6.豁免 (暂时性) /Exemption (temporary)
- 7. 等效安全/Equivalent Safety Findings:
- 8. 环境标准/Environmental Standards:

### III. 技术特性和运行限制/Technical Characteristics and Operational Limitations

- 1. A340-600 装 RR 发动机/ A340-600 powered by Rolls Royce engines
  - 1.1 型号设计定义 /Type Design Definition:
  - 1.2 发动机 /Engines:
    - 1.2.1 发动机限制/Engine Limits:
  - 1.3 燃油 / Fuel
  - 1.4 限制速度 /Limit Speeds
  - 1.5 重心范围 / Centre of Gravity Range
  - 1.6 最大审定重量 / Maximum Certified Weights
  - 1.7 注 / Note
- 2. 适用于所有 A340-600 系列的数据/ Data pertinent to all A340-600 series
  - 2.1 燃油量 (0.8 千克/升) / Fuel quantity (0.8 kg/liter) :

2.1.1A340-642 without mod 53000 and without mod 54679  
2.1.2A340-642 with mod 54679  
2.1.3A340-642 with mod 53000, A340-643 (0.8 kg/l)  
2.2 最小飞行机组 /Minimum Flight Crew:  
2.3 最大座椅布局数量 /Maximum Seating Capacity  
2.4 货舱载荷 / Cargo compartment loading  
2.5 环境飞行包线 / Environmental Flight Envelope  
2.6 其它限制 / Other Limitations  
2.7 辅助动力装置(APU) / Auxiliary Power Unit (APU)  
2.8 设备 / Equipment  
2.9 全部气象能力 / All Weather Capabilities  
2.10 机轮和轮胎 / Wheels and Tyres  
2.11 液压 / Hydraulics  
2.12 维护要求和适航限制 / Maintenance Instructions and Airworthiness Limitations  
第五节:A340-500 系列/ SECTION 5: A340-500 SERIES

#### I. 概述 /General

##### 1.飞机/Aeroplane:

#### II. 认可审定基础/ Validation Basis

##### 1.认可审定基础/ Validation Basis

##### 2. EASA 审查参考的申请日期/ Reference Application Date for EASA Certification:

##### 3. EASA 审定日期(JAA 建议)/ EASA Certification Date (JAA recommendation):

##### 4. EASA 审定基础 / EASA Certification Basis:

##### 5. 专用条件/Special Conditions:

##### 6.豁免（暂时性）/Exemption (temporary)

##### 7. 等效安全/Equivalent Safety Findings:

##### 8. 环境标准/Environmental Standards:

#### III. 技术特性和运行限制/Technical Characteristics and Operational Limitations

##### 1. A340-500 装 RR 发动机/A340-500 powered by Rolls Royce engines

##### 1.1 型号设计定义 /Type Design Definition:

##### 1.2 发动机 /Engines:

##### 1.2.1 发动机限制/Engine Limits:

##### 1.3 燃油 / Fuel

##### 1.4 限制速度 /Limit Speeds

##### 1.5 重心范围 / Centre of Gravity Range

##### 1.6 最大审定重量 / Maximum Certified Weights

##### 1.7 注 / Note

##### 2. 适用于所有 A340-500 系列的数据/Data pertinent to all A340-500 series

##### 2.1 燃油量（0.8 千克/升）/Fuel quantity (0.8 kg/liter):

##### 2.1.1A340-541 without mod 53000

##### 2.1.2A340-541 with mod 53000, A340-542

##### 2.2 最小飞行机组 /Minimum Flight Crew:

##### 2.3 最大座椅布局数量 /Maximum Seating Capacity

##### 2.4 货舱载荷 / Cargo compartment loading

##### 2.5 环境飞行包线 / Environmental Flight Envelope

##### 2.6 其它限制 / Other Limitations

##### 2.7 辅助动力装置(APU) / Auxiliary Power Unit (APU)

##### 2.8 设备 / Equipment

##### 2.9 全部气象能力 / All Weather Capabilities

##### 2.10 机轮和轮胎 / Wheels and Tyres

##### 2.11 液压 / Hydraulics

##### 2.12 维护要求和适航限制 / Maintenance Instructions and Airworthiness Limitations

## 第二节:A340-200 系列/ Airbus A340-200

### I. 概述 / GENERAL

#### 1. 机型/Aeroplane:

Airbus A340-200

### II. 认可审定基础/ Validation Basis

#### 1. 认可审定基础/ Validation Basis

中国民用航空总局的认可审定基础为/ Validation Basis:

1.1 欧洲联合适航当局的合格审定基础: / CAAC accepts the Certification Basis of EASA as the Validation Basis:

1.2 CAAC 的附加要求/ CAAC Additional Requirement:

参见问题纪要 G001 / Refer to Issue Paper G001

1. The Chinese fuel mainly used for civil aviation is No. 3 Jet fuel (GB 6537-94). The fuel needs to be approved for the airplanes before its operation in China.
2. As per CCAR 21.29(e), All literal markings and placards on an airplane used for advising, warning, or notifying passengers must be at least in Chinese; all literal markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of emergency exits and doors and their means of opening must be at least in Chinese; and all the operation instructions of airplane emergency equipment that may be used by passengers must be at least in Chinese.
3. As per Airworthiness Management Document No. AA2002093, the pilot compartment doors and the security considerations should comply with: § 25.772 Pilot compartment doors, and § 25.795 Security considerations

交付中国的每架飞机, 必须安装满足 CAAC 要求的驾驶舱门(空客改装包 No.50014)/Each aircraft delivered in China shall be equipped with reinforced cockpit door meeting CAAC requirement(Airbus Modification No.50014)

4. Quick Access Recorder (QAR) must be installed on each aircraft (reference to CAD97-MULT-38).
5. Altimeter should display flight altitude with the metric system.

#### 2. EASA 审查参考的申请日期/ Reference Application Date for EASA Certification:

1988 年 6 月 15 日/15 JUNE 1988

#### 3. EASA 审定日期(JAA 建议)/ EASA Certification Date (JAA recommendation):

(对于 2003 年 9 月 28 日前审定的型别, DGAC-F TC 183 仍然是有效的参考 / DGAC-F TC 183 remains a valid reference for models certified before 28. September 2003)

A340-211: 1992 年 12 月 22 日/22 December 1992

A340-212: 1994 年 3 月 14 日/14 March 1994

A340-213: 1995 年 12 月 19 日/19 December 1995

#### 4. EASA 审定基础/EASA Certification Basis:

- 欧洲联合航空条例 JAR25 部, 1989 年 10 月 5 日生效的第 13 号修正案, 除下列之外:/JAR 25 Change 13 effective on October 5, 1989 with the following exceptions:

在限定区域符合性偏离 JAR25.561 和 JAR25.562 的要求, 例如: /deviation on limited areas for compliance against paragraphs 25-561 and 25-562 such as :

- 在机身轮廓线外的机翼油箱符合第 12 号修订。/Compliance at change 12 for wing tank outside the fuselage contour,
- 为表明符合 JAR25.785(a)(b)(c) 的要求, 壁板与壁板之后的最前排座椅未按 JAR 25.562(c)(5)(6) 试验。替代方法是, 座椅和壁板间的距离最小是 35 英寸, 认为是可接受的替代方法。/ For showing compliance with JAR 25.785 (a)(b)(c), the front row seats located behind a bulkhead are not tested according to JAR 25.562(c)(5)(6). Instead, a minimum 35 inches distance between the seats and the bulkhead is considered an acceptable alternative.

- JAR AWO Change 1
- NPA JAR AWO-3 (低能见度下的起飞 / Take-off in low visibility)
- OP 91/1 离散突风 / for discrete gust

#### 5. 专用条件/Special Conditions:

SC G-5 阻燃术语(NPA 25D-181)/SC G-5 Resistance to fire terminology (NPA 25D-181)

SC G-7 功能及可靠性试验/SC G-7 Function and reliability testing  
 SC A-1 离散突风要求(NPA 25C-205)/SC A-1 Discrete gust requirements (NPA 25C-205)  
 SC A-2 系统与结构的相互作用(NPA 25C-199)/SC A-2 Interaction of systems and structure (NPA 25C-199)  
 SC A-3 设计机动要求/SC A-3 Design maneuver requirements  
 SC A-4 设计俯冲速度/SC A-4 Design dive speed  
 SC A-5 限制驾驶员操纵力和扭矩/SC A-5 Limit pilot forces and torque  
 SC A-7 结构设计的失速速度/SC A-7 Stalling speeds for structural design  
 SC A-11 气动弹性稳定性要求(NPA 25B, C, D-236)/SC A-11 Aeroelastic stability requirements (NPA 25B, C, D-236)  
 SC F-1 失速和预期使用速度/SC F-1 Stalling and scheduled operating speeds  
 SC F-2 驾驶舱操纵的运动和影响/SC F-2 Motion and effects of cockpit controls  
 SC F-3 纵向静稳定性/SC F-3 Static longitudinal stability  
 SC F-4 航向和横向静稳定性/SC F-4 Static directional and lateral stability  
 SC F-5 飞行包线保护/SC F-5 Flight envelope protections  
 SC F-6 正常载荷因子限制系统/SC F-6 Normal load factor limiting system  
 SC S-3 起落架警告(NPA 25D-162)/SC S-3 Landing gear warning (NPA 25D-162)  
 SC S-6 闪电防护的间接影响/SC S-6 Lightning protection indirect effects  
 SC S-10 外部辐射对机上系统的影响/SC S-10 Effects of external radiations upon aircraft systems  
 SC S-13 自动推力系统/SC S-13 Autothrust system  
 SC S-16 控制信号完整性/SC S-16 Control signal integrity  
 SC S-18 电子飞行控制/SC S-18 Electronic flight controls  
 SC S-20 应急电源(NPA 25D, F-179)/SC S-20 Emergency electrical power (NPA 25D, F-179)  
 SC S-23 电线和混合电的要求(NPA 25D, F-191)/SC S-23 Electrical wiring and miscellaneous electrical requirements (NPA 25D, F-191)  
 SC S-24 门 (NPA 25D, F-251)/SC S-24 Doors (NPA 25D, F-251)  
 SC S-38 无牵引拖把牵引 / Towbarless towing  
 SC P-1 全权数字式电子控制/SC P-1 FADEC  
 SC P-2 配平油箱/SC P-2 Trim tank  
 SC E-2 机组休息/Crew rest  
 SC E-5.1 下舱面厕所(自2000年8月适用)/Lower deck Lavatory (applicable from August 2000)  
 SC E-8.1 下舱面储藏区(自2000年8月适用)/Lower deck stowage area (applicable from August 2000)  
 SC E-11 下舱机组休息 间(自2002年1月适用)/Bulk crew rest compartment (applicable from January 2002)  
 SC E-19F/C滑动银幕(自2003年9月适用)/ F/C sliding screens (applicable from September 2003)

#### 6. 等效安全/Equivalent Safety Findings:

SC F-8 (or F-8.1) (加速停止距离)与 SC S-21(刹车)定义的要求已对欧洲联合航空条例 JAR 25 (NPA 25 B, D, G 244)提供了等效安全水平。/SC F-8(或 8.1) and SC S-21 have been found to provide an equivalent safety level to JAR 25 accelerate-stop and brakes qualification requirements (NPA 25 B, D, G 244)

CRI S-45 已对欧洲联合航空条例 JAR 25. 1549(a) 提供了等效安全水平。/CRI S-45 provides an equivalent level of safety to JAR 25.1549(a)

CRI S-48 已对欧洲联合航空条例 JAR AWO 313CRI 提供了等效安全水平。/S-48 provides an equivalent level of safety to JAR AWO 313

CRI P-9 已对欧洲联合航空条例 JAR 25.1203(d) 提供了等效安全水平。/CRI P-9 provides an equivalent level of safety to JAR 25.1203(d)

CRI E-15 已对欧洲联合航空条例 JAR 25.772 提供了等效安全水平。(自 2002 年 7 月适用)/CRI E-15 provides an equivalent level of safety to JAR 25.772 (applicable from July 2002)

**CRI E-17 provides an equivalent level of safety to JAR 25.819(g)(2)(3) (applicable from November 2003)**

CRI E-18 已对欧洲联合航空条例 JAR 25.819(f) 提供了等效安全水平。(自 2003 年 11 月适用)/CRI E-18 provides an equivalent level of safety to JAR 25.819(f) (applicable from November 2003)

#### 7. 环境标准/Environmental Standards:

噪声、燃油排放及排泄物的环境要求/Environmental requirements for noise, fuel venting and emissions :

国际民航组织附件 16 卷 1 第 3 章和卷 2/ICAO Annex 16 Volume 1 – Chapter 3 and Volume 2

如果实施了 Mod. 55005, 则满足国际民航组织附件 16 卷 1 第 4 章 / ICAO Annex 16 Volume 1 - Chapter 4 if Mod. 55005 is embodied.

#### 8. A340-213 Weight Variant 021 only

专用条件/等效安全/Special Condition / Equivalent Safety Finding:

下列专用条件/等效安全要求与上面4/5条要求相同。 / The following requirements are in addition of Special Conditions / ESF identified in paragraphs 4/5 above:

- SC F-8.1适用替代SC F-8。/SC F-8.1 is applicable instead of SC F-8.
- 等效安全S-148 (JAR NPA AW0-8)替代S-48。/ESF S-148 (JAR NPA AW0-8) replaces S-48.

### III.技术特性和运行限制/Technical Characteristics and Operational Limitations

四台涡轮风扇发动机、远航程、双过道的大型飞机。 / Four turbo-fan, long range, twin-aisle, large category airplane.

#### 1. A340-200 装 CFMI 发动机/ A340-200 powered by CFMI engines

##### 1.1 型号设计定义 / Type Design Definition

A340-211: 00F000A0211/C00

A340-212: 00F000A0212/C00

A340-213: 00F000A0213/C00

##### 1.2 发动机 / Engines

A340-211: 4 台 Four (4) CFM56-5C2 或 CFM56-5C2/4 或 CFM56-5C2/F 或 CFM56-5C2/F4 或 CFM56-5C2/G 或 CFM56-5C2/G4 或 CFM56-5C2/P 涡轮风扇发动机。 / 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: 四台 Four (4) CFM56-5C3/F 或 CFM56-5C3/F4 或 CFM56-5C3/G 或 CFM56-5C3/G4 或 CFM56-5C3/P turbofan engines 涡轮风扇发动机。 / 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: 四台 CFM56-5C4 或 CFM56-5C4/1 或 CFM56-5C4/P 或 CFM56-5C4/1P 涡轮风扇发动机。 / Four (4) CFM56-5C4 or CFM56-5C4/1 or CFM56-5C4/P or CFM56-5C4/1P turbofan engines

##### 1.2.1 发动机限制/ Engine Limits

| 动力装置限制/ENGINE LIMITS<br>数据单 DATA SHEET E37NE (FAA)<br><br>EASA E-003                                             | A340-211<br>CFM56-5C2<br>CFM56-5C2/4<br>CFM56-5C2/F<br>CFM56-5C2/F4<br>CFM56-5C2/G<br>CFM56-5C2/G4<br>CFM56-5C2/P | A340-212<br>CFM56-5C3/F<br>CFM56-5C3/F4<br>CFM56-5C3/G<br>CFM56-5C3/G4<br>CFM56-5C3/P | A340-213<br>CFM56-5C4<br>CFM56-5C4/1<br>CFM56-5C4/P<br>CFM56-5C4/1P |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| 海平面静推力/Static thrust at sea level:<br>起飞 (5 分钟)take-off (5mn)* (flat rated 30°C)<br>最大连续/maximum continuous      | 13,878 daN<br>12,588 daN                                                                                          | 14,456 daN<br>13,078 daN                                                              | 15,124 daN<br>13,371 daN                                            |
| 批准滑油/Approved oils : see CFMI engine Service Bulletin N°79-001, latest revision /看 CFMI 发动机服务通告 N°79-001, 及后续版本。 |                                                                                                                   |                                                                                       |                                                                     |

/ 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

其它发动机限制/Other engine limitations: 见相应的发动机型号合格证数据单。/See the relevant Engine Type Certificate Data Sheet.

### 1.3 燃油 / Fuel

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

/ Additives: See CFMI "Specific Operating Instructions", installation manual.

上述提及的燃油和添加剂也适用于辅助动力装置。/The above mentioned fuels and additives are also suitable for the APU.

### 1.4 限制速度 / Limit Speeds

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

### 1.5 重心范围 / Center of Gravity Range

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

### 1.6 最大审定重量 / Maximum Certified Weights

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

| VARIANT              | 000<br>Basic | 001<br>(41302) | 002<br>(44229) |
|----------------------|--------------|----------------|----------------|
| 最大起飞重量<br>/MTOW (T)  | 253.5        | 257            | 260            |
| 最大着陆重量<br>/MLW (T)   | 181          | 181            | 181            |
| 最大零燃油重量<br>/MZFW (T) | 169          | 169            | 169            |

**Valid for A340-213 Weight Variant 020 and on**

| VARIANT             | 021<br>(44281) |
|---------------------|----------------|
| 最大起飞重量/MTOW (T)     | 275            |
| 最大着陆重量/MLW (T)      | 185            |
| 最大零燃油重量/MZFW<br>(T) | 173            |

## 1.7 注释/Note

A340-211转换为A340-212/Conversion of A340-211 into A340-212:

A340-211 飞机通过申请服务通告 A340-00-4029 ( 50472 号 - CFM56-5C2/F 转换为 CFM56-5C3/F) 可被转换为 A340-212A 飞机/340-211 aircraft can be converted into A340-212 by application of Airbus Service Bulletin A340-00-4029 (Mod 50472 – conversion of CFM56-5C2/F into CFM56-5C3/F).

- A340-211 (CFM56-5C2/F 或/or CFM56-5C2/F4 发动机/engines) - A340-212 (CFM56-5C3/F 或 /or CFM56-5C3/F4 发动机/engines)  
最大燃油温度在起飞和最大持续运行时分别可达到 965°C 和 930°C 。然而 ECAM 显示为 950°C 和 915°C/.The maximum permissible gas temperature at take-off and max continuous is extended to 965°C and 930°C respectively. However, the ECAM indication remains at 950°C and 915°C.
- A340-211 (CFM56-5C2/G or CFM56-5C2/G4 or CFM56-5C2/P engines) - A340-212 (CFM 56-5C3/G or CFM56-5C3/G4 or CFM56-5C3/P engines) - A340-213 (CFM 56-5C4 or CFM56-5C4/P or CFM56-5C4/1P engines)  
最大燃油温度在起飞和最大持续运行时分别可达到 975°C 和 940°C 。然而 ECAM 显示为 950°C 和 915°C/.The maximum permissible gas temperature at take-off and maximum continuous extended to 975°C and 940°C respectively, however the ECAM indications remain at 950°C and 915°C.
- A340-211 (Mod. 42680 or Mod. 43092 or Mod 44752 or Mod 51296)  
CFM56-5C2, CFM56-5C2/4, CFM56-5C2/F, CFM56-5C2/F4, CFM56-5C2/G, CFM56-5C2/G4, CFM56-5C2/P 发动机可以在相同的飞机上无论编号和位置的混合使用。/CFM56-5C2, CFM56-5C2/4, CFM56-5C2/F, CFM56-5C2/F4, CFM56-5C2/G, CFM56-5C2/G4, CFM56-5C2/P engine can be intermixed on the same aircraft whatever the number and the position.
- A340-212 (Mod. 43574 or Mod 44752 or Mod 51296)  
CFM56-5C3/F, CFM56-5C3/F4, CFM56-5C3/G, CFM56-5C3/G4, CFM56-5C3/P 发动机可以在相同的飞机上无论编号和位置的混合使用。/ 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, CFM56-5C4/1P 发动机可以在相同的飞机上无论编号和位置的混合使用。/ CFM56-5C4, CFM56-5C4/P, CFM56-5C4/1P engines can be intermixed on the same aircraft whatever the number or the position.
- A340-213 (Mod 44260)  
当安装 CFM56-5C4/1 发动机的情况，可以通过 Mod 44260 来启用推力限制 / When CFM56-5C4/1 engines are installed, the thrust bump can be activated by Mod 44260
- A340-213 (Mod 45912/45913)  
A340-213可以通过申请工业服务通告00-4016 (45912号)装配CFM56-5C2发动机，通过A340-213 工业服务通告 00-4017 (45913号)恢复安装CFM56-5C4发动机。/ 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).

## 4. 适用于所有 A340-200 系列的数据/ Data pertinent to all A340-200 series

### 4.1 燃油量 / Fuel Quantity(0.8 kg/liter):

| 油箱/TANK            | 3 油箱飞机 3 TANK AIRPLANE                    |                                                           |                                              |
|--------------------|-------------------------------------------|-----------------------------------------------------------|----------------------------------------------|
|                    | 可用燃油 升（公斤）<br>/Usable fuel<br>liters (kg) | 可用燃油 升（公斤）<br>/Usable fuel<br>liters (kg)<br>(Mod. 46761) | 不可用燃油 升（公斤）<br>/Unusable fuel<br>liters (kg) |
| 机翼/WING            | 91,056 (72,845)                           | 91,056 (72,845)                                           | 245 (196)                                    |
| CENTER             | 41,468 (33,174)                           | 41,468 (33,174)                                           | 83 (66)                                      |
| 配平油箱 /TRIM<br>TANK | 6,114<br>(4,891)                          | 6,230<br>(4,984)                                          | 6 (5)                                        |
| 总计/TOTAL           | 138,638 (110,910)                         | 138,754 (111,003)                                         | 334 (267)                                    |

## A340-213 Weight Variant 021 and on

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

## 4.2 最小飞行机组 / Minimum Flight Crew

2 人：驾驶员和副驾驶员。 / Two (2): Pilot and Co-pilot

## 4.3 最大座椅布局数量 / Maximum Seating Capacity

由应急撤离批准的最大乘员数为： /The maximum number of passengers approved for emergency evacuation is:

375 基本型/375 basic

420 选装型(装 4 个 A 型门- Mod 40161)/ 420 when 4 Type A doors installed (mod 40161).  
交付时每架飞机批准的最大乘员容量见客舱内部布置图。/ See interior layout drawing for the maximum passenger capacities approved for each aircraft when delivered.

#### 4.4 货舱载荷 / Cargo Compartment Loading

| 货舱/Cargo compartment | 最大载荷 (公斤) / Maximum load (kg) |
|----------------------|-------------------------------|
| 前/Forward            | 18,507                        |
| 后/Aft                | 15,241                        |
| 最后 (散装) /Rear (bulk) | 3 468                         |

关于集装箱、集装板及相关重量的授权的每一位置和装载条件, 见《重量平衡手册》章节 1.10。  
/ For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weights), see Weight and Balance Manual Chapter 1.10 ref.:

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

#### 4.5 环境飞行包线 / Environmental Flight Envelope

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 4.6 其它限制 / Other Limitations

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 4.7 辅助动力装置 (APU) / Auxiliary Power Unit (APU)

一台 GARRET AIRESEARCH GTCP 331-350C 型(规范 31-7677A / Specification 31-7677A)。/ One GARRETT GTCP 331-350C (Specification 31-7677A)

滑油: 参见适用的经批准的手册 / Oils: refer to applicable approved Manuals

#### 4.8 设备 / Equipment

应安装适用条款要求的设备。/The equipment required by the applicable requirements shall be installed.

客舱设施, 设备和布置应符合下述规范。/Cabin furnishings, equipment and arrangement shall conform to the following specification:

- 00F252F0005/C01 客舱座椅/for cabin seats
- 00F252F0006/C01 厨房/for galley
- 00F252F0020/C01 客舱乘务员座椅/for cabin attendant seats

#### 4.9 全部气象能力 / All Weather Capacities

##### **A340-211:**

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

##### **A340-212:**

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

##### **A340-213:**

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

#### 4.10 机轮和轮胎 / Wheels and Tyres

参见空客服务公告A340-32-4007。/ Refer to Airbus Service Bulletin A340-32-4007.

#### 4.11 液压 / Hydraulics

液体规范: IV 型 - 《NSA 307-110》。 / Fluid specifications: TYPE IV (NSA 307-110).

#### 4.12 维护要求和适航限制 / Maintenance Instructions and Airworthiness Limitations

- 适用于安全寿命适航限制项的限制部分见 EASA 批准的 A340 适航限制部分 (ALS), 1-2 分部和 1-3 分部 (Document 00F050AM091/C01) / 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 (Document 00F050AM091/C01);
- 适用于损伤容限适航限制项的限制部分见 EASA 批准的 A340 适航限制部分 (ALS), 第 2 部分 (Document 00F050A3401/C01) / Limitations applicable to Damage Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) Part 2 approved by EASA (Document 00F050A3401/C01);
- 审定维修要求见 EASA 批准的 A340 适航限制部分 (ALS), 第 3 部分 (Document 00F050A0003/C01) / Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA (Document 00F050A0003/C01);
- Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5 approved by EASA (Document 00F050A0009/C01);
- MRB 报告 00F050A0002/C01 / Maintenance Review Board report 00F050A0002/C01.

## 第二节:A340-300 系列/ Airbus A340-300

### I. 概述 / GENERAL

#### 1. 机型/Aeroplane:

Airbus A340-300

### II. 认可审定基础/ Validation Basis

#### 2. 认可审定基础/ Validation Basis

中国民用航空总局的认可审定基础为/ Validation Basis:

1.1 欧洲联合适航当局的合格审定基础: / CAAC accepts the Certification Basis of EASA as the Validation Basis:

1.2 CAAC 的附加要求/ CAAC Additional Requirement:

参见问题纪要 G001 / Refer to Issue Paper G001

1. The Chinese fuel mainly used for civil aviation is No. 3 Jet fuel (GB 6537-94). The fuel needs to be approved for the airplanes before its operation in China.
2. As per CCAR 21.29(e), All literal markings and placards on an airplane used for advising, warning, or notifying passengers must be at least in Chinese; all literal markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of emergency exits and doors and their means of opening must be at least in Chinese; and all the operation instructions of airplane emergency equipment that may be used by passengers must be at least in Chinese.
3. As per Airworthiness Management Document No. AA2002093, the pilot compartment doors and the security considerations should comply with: § 25.772 Pilot compartment doors, and § 25.795 Security considerations  
交付中国的每架飞机, 必须安装满足 CAAC 要求的驾驶舱门(空客改装包 No.50014)/Each aircraft delivered in China shall be equipped with reinforced cockpit door meeting CAAC requirement(Airbus Modification No.50014)
4. Quick Access Recorder (QAR) must be installed on each aircraft (reference to CAD97-MULT-38).
5. Altimeter should display flight altitude with the metric system.

2. EASA 审查参考的申请日期/ Reference Application Date for EASA Certification:

1998 年 6 月 15 日/15 JUNE 1998

3. EASA 审定日期(JAA 建议)/ EASA Certification Date (JAA recommendation):

(对于 2003 年 9 月 28 日前审定的型别, DGAC-F TC 183 仍然是有效的参考 / DGAC-F TC 183 remains a valid reference for models certified before 28. September 2003)

|           |                                   |
|-----------|-----------------------------------|
| A340-311: | 1992 年 12 月 22 日/22 December 1992 |
| A340-312: | 1994 年 3 月 14 日/14 March 1994     |
| A340-313: | 1995 年 3 月 16 日/16 March 1995     |

4. EASA 审定基础/EASA Certification Basis:

- 欧洲联合航空条例 JAR25 部, 1989 年 10 月 5 日生效的第 13 号修正案, 除下列之外:/JAR 25 Change 13 effective on October 5, 1989 with the following exceptions:

在限定区域符合性偏离 JAR25.561 和 JAR25.562 的要求, 例如: /deviation on limited areas for compliance against paragraphs 25-561 and 25-562 such as :

- 在机身轮廓线外的机翼油箱符合第 12 号修订。/Compliance at change 12 for wing tank outside the fuselage contour,
- 为表明符合 JAR25.785(a)(b)(c) 的要求, 壁板与壁板之后的最前排座椅未按 JAR 25.562(c)(5)(6) 试验。替代方法是, 座椅和壁板间的距离最小是 35 英寸, 认为是可接受的替代方法。/ For showing compliance with JAR 25.785 (a)(b)(c), the front row seats located behind a bulkhead are not tested according to JAR 25.562(c)(5)(6). Instead, a minimum 35 inches distance between the seats and the bulkhead is considered an acceptable alternative.

- JAR AWO Change 1
- NPA JAR AWO-3 (低能见度下的起飞 / Take-off in low visibility)
- OP 91/1 离散突风 / for discrete gust

5. 专用条件/Special Conditions:

SC G-5 阻燃术语(NPA 25D-181)/SC G-5 Resistance to fire terminology (NPA 25D-181)

SC G-7 功能及可靠性试验/SC G-7 Function and reliability testing

SC A-1 离散突风要求(NPA 25C-205)/SC A-1 Discrete gust requirements (NPA 25C-205)

SC A-2 系统与结构的相互作用(NPA 25C-199)/SC A-2 Interaction of systems and structure (NPA 25C-199)

SC A-3 设计机动要求/SC A-3 Design maneuver requirements

SC A-4 设计俯冲速度/SC A-4 Design dive speed

SC A-5 限制驾驶员操纵力和扭矩/SC A-5 Limit pilot forces and torque

SC A-7 结构设计的失速速度/SC A-7 Stalling speeds for structural design

SC A-11 气动弹性稳定性要求(NPA 25B, C, D-236)/SC A-11 Aeroelastic stability requirements (NPA 25B, C, D-236)

SC F-1 失速和预期使用速度/SC F-1 Stalling and scheduled operating speeds

SC F-2 驾驶舱操纵的运动和影响/SC F-2 Motion and effects of cockpit controls

SC F-3 纵向静稳定性/SC F-3 Static longitudinal stability

SC F-4 航向和横向静稳定性/SC F-4 Static directional and lateral stability

SC F-5 飞行包线保护/SC F-5 Flight envelope protections

SC F-6 正常载荷因子限制系统/SC F-6 Normal load factor limiting system

SC S-3 起落架警告(NPA 25D-162)/SC S-3 Landing gear warning (NPA 25D-162)

SC S-6 闪电防护的间接影响/SC S-6 Lightning protection indirect effects

SC S-10 外部辐射对机上系统的影响/SC S-10 Effects of external radiations upon aircraft systems

SC S-13 自动推力系统/SC S-13 Autothrust system

SC S-16 控制信号完整性/SC S-16 Control signal integrity

SC S-18 电子飞行控制/SC S-18 Electronic flight controls

SC S-20 应急电源(NPA 25D, F-179)/SC S-20 Emergency electrical power (NPA 25D, F-179)

SC S-23 电线和混合电的要求(NPA 25D, F-191)/SC S-23 Electrical wiring and miscellaneous electrical requirements (NPA 25D, F-191)

SC S-24 门 (NPA 25D, F-251)/SC S-24 Doors (NPA 25D, F-251)

SC S-38 无牵引拖把牵引 / Towbarless towing

SC P-1 全权数字式电子控制/SC P-1 FADEC

SC P-2 配平油箱/SC P-2 Trim tank

SC E-2 机组休息/Crew rest

SC E-5.1 下舱面厕所(自2000年8月适用)/Lower deck Lavatory (applicable from August 2000)

SC E-8.1 下舱面储藏区(自2000年8月适用)/Lower deck stowage area (applicable from August 2000)

SC E-11 下舱机组休息 间(自2002年1月适用)/Bulk crew rest compartment (applicable from January 2002)

SC E-19F/C滑动银幕(自2003年9月适用)/ F/C sliding screens (applicable from September 2003)

#### 6. 等效安全/Equivalent Safety Findings:

SC F-8 (or F-8.1) (加速停止距离) 与 SC S-21 (刹车) 定义的要求已对欧洲联合航空条例 JAR 25 (NPA 25 B, D, G 244) 提供了等效安全水平。/SC F-8 (或 8.1) and SC S-21 have been found to provide an equivalent safety level to JAR 25 accelerate-stop and brakes qualification requirements (NPA 25 B, D, G 244)

CRI S-45 已对欧洲联合航空条例 JAR 25. 1549(a) 提供了等效安全水平。/CRI S-45 provides an equivalent level of safety to JAR 25.1549(a)

CRI S-48 已对欧洲联合航空条例 JAR AWO 313 CRI 提供了等效安全水平。/S-48 provides an equivalent level of safety to JAR AWO 313

CRI P-9 已对欧洲联合航空条例 JAR 25.1203(d) 提供了等效安全水平。/CRI P-9 provides an equivalent level of safety to JAR 25.1203(d)

CRI E-15 已对欧洲联合航空条例 JAR 25. 772 提供了等效安全水平。(自 2002 年 7 月适用)/CRI E-15 provides an equivalent level of safety to JAR 25.772 (applicable from July 2002)

CRI E-17 provides an equivalent level of safety to JAR 25.819(g)(2)(3) (applicable from November 2003)

CRI E-18 已对欧洲联合航空条例 JAR 25.819(f) 提供了等效安全水平。(自 2003 年 11 月适用)/CRI E-18 provides an equivalent level of safety to JAR 25.819(f) (applicable from November 2003)

#### 7. 环境标准/Environmental Standards:

噪声、燃油排放及排泄物的环境要求/Environmental requirements for noise, fuel venting and emissions :

国际民航组织附件 16 卷 1 第 3 章和卷 2/ICAO Annex 16 Volume 1 – Chapter 3 and Volume 2

如果实施了 Mod. 55005, 则满足国际民航组织附件 16 卷 1 第 4 章 / ICAO Annex 16 Volume 1 – Chapter 4 if Mod. 55005 is embodied.

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

专用条件/等效安全/Special Condition / Equivalent Safety Finding:

下列专用条件/等效安全要求与上面4/5条要求相同。 / The following requirements are in addition of Special Conditions / ESF identified in paragraphs 4/5 above:

- SC F-8.1适用替代SC F-8。 /SC F-8.1 is applicable instead of SC F-8.
- 等效安全S-148 (JAR NPA AW0-8)替代S-48。 /ESF S-148 (JAR NPA AW0-8) replaces S-48.

### III.技术特性和运行限制/Technical Characteristics and Operational Limitations

四台涡轮风扇发动机、远航程、双过道的大型飞机。 / Four turbo-fan, long range, twin-aisle, large category airplane.

#### 1. A340-300 装 CFMI 发动机/ A340-300 powered by CFMI engines

##### 1.1 型号设计定义 / Type Design Definition

A340-311: 00F000A0311/C00

A340-312: 00F000A0312/C00

A340-313: 00F000A0313/C00

##### 1.2 发动机 / Engines

A340-311: 4 台 Four (4) CFM56-5C2 或 CFM56-5C2/4 或 CFM56-5C2/F 或 CFM56-5C2/F4 或 CFM56-5C2/G 或 CFM56-5C2/G4 或 CFM56-5C2/P 涡轮风扇发动机。 / 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: 四台 Four (4) CFM56-5C3/F 或 CFM56-5C3/F4 或 CFM56-5C3/G 或 CFM56-5C3/G4 或 CFM56-5C3/P 涡轮风扇发动机。 / 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: 四台 CFM56-5C4 或 CFM56-5C4/1 或 CFM56-5C4/P 或 CFM56-5C4/1P 涡轮风扇发动机。 / Four (4) CFM56-5C4 or CFM56-5C4/1 or CFM56-5C4/P or CFM56-5C4/1P turbofan engines

##### 1.2.1 发动机限制/ Engine Limits

| 动力装置限制/ENGINE LIMITS<br>数据单 DATA SHEET E37NE (FAA)<br><br>EASA E-003                                             | A340-311<br>CFM56-5C2<br>CFM56-5C2/4<br>CFM56-5C2/F<br>CFM56-5C2/F4<br>CFM56-5C2/G<br>CFM56-5C2/G4<br>CFM56-5C2/P | A340-312<br>CFM56-5C3/F<br>CFM56-5C3/F4<br>CFM56-5C3/G<br>CFM56-5C3/G4<br>CFM56-5C3/P | A340-313<br>CFM56-5C4<br>CFM56-5C4/1<br>CFM56-5C4/P<br>CFM56-5C4/1P |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| 海平面静推力/Static thrust at sea level:<br>起飞 (5 分钟)take-off (5mn)* (flat rated 30°C)<br>最大连续/maximum continuous      | 13,878 daN<br>12,588 daN                                                                                          | 14,456 daN<br>13,078 daN                                                              | 15,124 daN<br>13,371 daN                                            |
| 批准滑油/Approved oils : see CFMI engine Service Bulletin N°79-001, latest revision /看 CFMI 发动机服务通告 N°79-001, 及后续版本。 |                                                                                                                   |                                                                                       |                                                                     |

/ 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

其它发动机限制/Other engine limitations: 见相应的发动机型号合格证数据单。/See the relevant Engine Type Certificate Data Sheet.

#### 1.4 燃油 / Fuel

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

/ Additives: See CFMI "Specific Operating Instructions", installation manual.

上述提及的燃油和添加剂也适用于辅助动力装置。/The above mentioned fuels and additives are also suitable for the APU.

#### 1.4 限制速度 / Limit Speeds

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 1.5 重心范围 / Center of Gravity Range

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 1.6 最大审定重量 / Maximum Certified Weights

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

| VARIANT              | 000<br>Basic | 001<br>(41302) | 002<br>(44228) | 003<br>(44102) | 004<br>(44230) |
|----------------------|--------------|----------------|----------------|----------------|----------------|
| 最大起飞重量<br>/MTOW (T)  | 253.5        | 257            | 260            | 257            | 260            |
| 最大着陆重量<br>/MLW (T)   | 186          | 186            | 186            | 188            | 188            |
| 最大零燃油重量<br>/MZFW (T) | 174          | 174            | 174            | 178            | 178            |

##### **Valid for A340-313 only**

| VARIANT             | 020<br>(43500) | 021<br>(44135) | 023<br>(44625) | 024<br>(45738) | 025<br>(44791) |
|---------------------|----------------|----------------|----------------|----------------|----------------|
| 最大起飞重量<br>/MTOW (T) | 271            | 275            | 262            | 275            | 260            |
| 最大着陆重量<br>/MLW (T)  | 190            | 190            | 190            | 192            | 190            |

|                      |     |     |     |     |     |
|----------------------|-----|-----|-----|-----|-----|
| 最大零燃油重量<br>/MZFW (T) | 178 | 178 | 178 | 180 | 178 |
|----------------------|-----|-----|-----|-----|-----|

| VARIANT              | 026<br>(46613) | 027<br>(46650) | 028<br>(49529) | 050<br>(51808) | 051<br>(51809) | 052<br>(51810) |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 最大起飞重量<br>/MTOW (T)  | 275            | 271            | 276.5          | 275            | 275            | 276.5          |
| 最大着陆重量<br>/MLW (T)   | 192            | 192            | 190            | 192            | 192            | 192            |
| 最大零燃油重量<br>/MZFW (T) | 181            | 178            | 178            | 180            | 181            | 181            |

**Valid for A340-312 only**

| VARIANT              | 029<br>(53243) |
|----------------------|----------------|
| 最大起飞重量<br>/MTOW (T)  | 260            |
| 最大着陆重量<br>/MLW (T)   | 188            |
| 最大零燃油重量<br>/MZFW (T) | 178            |

#### 1.7 注释/Note

- A340-311转换为A340-312/Conversion of A340-311 into A340-312:  
A340-311 飞机通过申请服务通告 A340-00-4014 (45247 号) 可被转换为 A340-312 。/A340-311 aircraft can be converted into A340-312 by application of Airbus Service Bulletin A340-00-4014 (Mod 45247).
- A340-312转换为A340-311/Conversion of A340-312 into A340-311:  
A340-312 飞机通过申请服务通告可被转换为 A340-311。/A A340-312 aircraft can be converted into A340-311 by application of Airbus Service Bulletins:
  - o A340-00-4028 (47596号- CFM56-5C3/F 转换为CFM56-5C2 / Mod 47596 – Conversion of CFM56-5C3/F into CFM56-5C2).
  - o A340-00-4026 (47427号- CFM56-5C3/F 转换为CFM56-5C2/F / Mod 47427 – Conversion of CFM56-5C3/F into CFM56-5C2/F).
- A340-313转换为A340-312/Conversion of A340-313 into A340-312:
  - o A340-313飞机通过申请服务通告SB A340-00-4035 (53452号)  
可被转换为 A340-312 。/A340-313 aircraft can be converted into A340-312 by application of Airbus Service Bulletins:
  - o SB A340-00-4035 (Mod 53452)

- A340-313 WV 027 Short Range Variant
- The A340-313 WV 027 aircraft can be operated as short range variant and have their new design service goal increased to 30000 cycles respectively 60000 FH providing the following condition is fulfilled:  
“These aircraft are maintained according to the specific temporary inspection program as per letter AI/SE-M 95A.1372/98 and the revised MRB for SSIs’ quoted post modification 46651”
- A340-311 (CFM56-5C2/F or CFM56-5C2/F4 engines) - A340-312 (CFM56-5C3/F or CFM56-5C3/F4 engines)  
最大燃油温度在起飞和最大持续运行时分别可达到 965°C 和 930°C 。然而 ECAM 显示为 950°C 和 915°C./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)  
最大燃油温度在起飞和最大持续运行时分别可达到 975°C 和 940°C。然而 ECAM 显示为 950°C 和 915°C./The maximum permissible gas temperature at take-off and maximum continuous extended to 975°C and 940°C respectively, however the ECAM indications remain at 950°C and 915°C.
- A340-311 (Mod. 42680 or Mod. 43092 or Mod 44752 or Mod 51296)  
CFM56-5C2, CFM56-5C2/4, CFM56-5C2/F, CFM56-5C2/F4, CFM56-5C2/G, CFM56-5C2/G4, CFM56-5C2/P 发动机可以在相同的飞机上无论编号和位置的混合使用。/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 发动机可以在相同的飞机上无论编号和位置的混合使用。/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, CFM56-5C4/1P 发动机可以在相同的飞机上无论编号和位置的混合使用。/CFM56-5C4, CFM56-5C4/P, CFM56-5C4/1P engine can be intermixed on the same aircraft whatever the number or the position.
- A340-313 (Mod 44260)  
When CFM56-5C4/1 engines are installed, the thrust bump can be activated by Mod 44260
- A340-313 (Mod 45912/45913)  
A340-313 可以通过申请工业服务通告00-4016 (45912号)装配CFM56-5C2发动机, 通过A340-213工业服务通告00-4017 (45913号)恢复安装CFM56-5C4发动机。/A340-313 can be fitted with CFM56-5C2 engines by application of Airbus Industrie Service Bulletin 00-4016 (mod 45912) and revert to CFM56-5C4 engines installation by Airbus Industrie Service Bulletin 00-4017 (mod 45913).

#### 4. 适用于所有 A340-300 系列的数据/ Data pertinent to all A340-300 series

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

| 油箱/TANK               | 3 油箱飞机/3 TANK AIRPLANE                    |                                              |
|-----------------------|-------------------------------------------|----------------------------------------------|
|                       | 可用燃油 升（公斤）<br>/Usable fuel<br>liters (kg) | 不可用燃油 升（公斤）<br>/Unusable fuel<br>liters (kg) |
| 机翼/WING               | 91,056 (72,845)                           | 245 (196)                                    |
| CENTER                | 41,468 (33,174)                           | 83 (66)                                      |
| 配 平 油 箱 /TRIM<br>TANK | 6,114<br>(4,891)                          | 6 (5)                                        |
| 总计/TOTAL              | 138,638 (110,910)                         | 334 (267)                                    |

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

| 油箱/TANK             | 3 油箱飞机/3 TANK AIRPLANE                       |                                                 | 3 TANK AIRPLANE<br>WITH OPTIONAL ACTs<br>(mod 42612) |                                                     |
|---------------------|----------------------------------------------|-------------------------------------------------|------------------------------------------------------|-----------------------------------------------------|
|                     | 可用燃油 升<br>（公斤）<br>Usable fuel<br>liters (kg) | 不可用燃油 升<br>（公斤）<br>Unusable fuel<br>liters (kg) | 可用燃油 升<br>（公斤）<br>Usable fuel<br>liters (kg)         | 不可用燃油 升<br>（公斤）<br>/Unusable<br>fuel<br>liters (kg) |
| 机翼/WING             | 92,850<br>(74,280)                           | 245<br>(196)                                    | 92,850<br>(74,280)                                   | 245<br>(196)                                        |
| CENTER              | 42,420<br>(33,936)                           | 83<br>(66)                                      | 42,420<br>(33,936)                                   | 83<br>(66)                                          |
| 配平油箱/TRIM TANK      | 6,230<br>(4,984)                             | 6<br>(5)                                        | 6,230<br>(4,984)                                     | 6<br>(5)                                            |
| 1 ACT in cargo hold |                                              |                                                 | 7,200<br>(5,760)                                     | 28<br>(22)                                          |
| 总计/TOTAL            | 141,500<br>(113,200)                         | 334<br>(267)                                    | 148,700<br>(118,960)                                 | 362<br>(290)                                        |

| 油箱/TANK        | 3 油箱飞机/3 TANK AIRPLANE                       |                                                 |
|----------------|----------------------------------------------|-------------------------------------------------|
|                | 可用燃油 升<br>(公斤)<br>Usable fuel<br>liters (kg) | 不可用燃油 升<br>(公斤)<br>Unusable fuel<br>liters (kg) |
| 机翼/WING        | 92,850<br>(74,280)                           | 245<br>(196)                                    |
| CENTER         | 41,560<br>(33,248)                           | 83<br>(66)                                      |
| 配平油箱/TRIM TANK | 6,230<br>(4,984)                             | 6<br>(5)                                        |
| 总计/TOTAL       | 140,640<br>(112,512)                         | 334<br>(267)                                    |

## 4.2 最小飞行机组 / Minimum Flight Crew

2 人：驾驶员和副驾驶员。/ Two (2): Pilot and Co-pilot

## 4.3 最大座椅布局数量 / Maximum Seating Capacity

由应急撤离批准的最大乘员数为：/The maximum number of passengers approved for emergency evacuation is:

375 基本型/375 basic

440 选装型(装 4 个 A 型门- Mod 40161)/ 440 when 4 Type A doors installed (mod 40161).

交付时每架飞机批准的最大乘员容量见客舱内部布置图。/ See interior layout drawing for the maximum passenger capacities approved for each aircraft when delivered.

## 4.4 货舱载荷 / Cargo Compartment Loading

| 货舱/Cargo compartment | 最大载荷 (公斤) / Maximum load (kg) |
|----------------------|-------------------------------|
| 前/Forward            | 22861                         |
| 后/Aft                | 18507                         |
| 最后 (散装) /Rear (bulk) | 3468                          |

关于集装箱、集装板及相关重量的授权的每一位置和装载条件，见《重量平衡手册》章节 1.10。  
/ For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weights), see Weight and Balance Manual Chapter 1.10 ref.:

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

## 4.5 环境飞行包线 / Environmental Flight Envelope

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

## 4.6 其它限制 / Other Limitations

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 4.7 辅助动力装置 (APU) / Auxiliary Power Unit (APU)

一台 GARRET AIRESEARCH GTCP 331-350C 型(规范 31-7677A / Specification 31-7677A)。 / One GARRETT GTCP 331-350C (Specification 31-7677A)

滑油: 参见适用的经批准的手册 / Oils: refer to applicable approved Manuals

#### 4.8 设备 / Equipment

应安装适用条款要求的设备。 / The equipment required by the applicable requirements shall be installed.

客舱设施, 设备和布置应符合下述规范。 / Cabin furnishings, equipment and arrangement shall conform to the following specification:

00F252K0005/C01 客舱座椅/for cabin seats

00F252K0006/C01 厨房/for galley

00F252K0020/C01 客舱乘务员座椅/for cabin attendant seats

#### 4.9 全部气象能力 / All Weather Capacities

##### **A340-311:**

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

##### **A340-312:**

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

##### **A340-313:**

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

#### 4.10 机轮和轮胎 / Wheels and Tyres

参见空客服务公告A340-32-4007. / Refer to Airbus Service Bulletin A340-32-4007.

#### 4.11 液压 / Hydraulics

液体规范: IV 型 - 《NSA 307-110》。 / Fluid specifications: TYPE IV (NSA 307-110).

#### 4.12 维护要求和适航限制 / Maintenance Instructions and Airworthiness Limitations

- 适用于安全寿命适航限制项的限制部分见 EASA 批准的 A340 适航限制部分 (ALS), 1-2 分部和 1-3 分部 (Document 00F050AM091/C01) / 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 (Document 00F050AM091/C01);
- 适用于损伤容限适航限制项的限制部分见 EASA 批准的 A340 适航限制部分 (ALS), 第 2 部分 (Document 00F050A3401/C01) / Limitations applicable to Damage Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) Part 2 approved by EASA (Document 00F050A3401/C01);
- 审定维修要求见 EASA 批准的 A340 适航限制部分 (ALS), 第 3 部分 (Document 00F050A0003/C01) / Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA (Document 00F050A0003/C01);
- Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5 approved by EASA (Document 00F050A0009/C01);
- MRB 报告 00F050A0002/C01 / Maintenance Review Board report 00F050A0002/C01.

#### 第四节:A340-600 系列/ Airbus A340-600

##### I. 概述 / GENERAL

##### 1. 机型/Aeroplane:

Airbus A340-600

##### II. 认可审定基础/ Validation Basis

##### 3. 认可审定基础/ Validation Basis

中国民用航空总局的认可审定基础为/ Validation Basis:

1.1 欧洲联合适航当局的合格审定基础: / CAAC accepts the Certification Basis of EASA as the Validation Basis:

1.2 CAAC 的附加要求/ CAAC Additional Requirement:

参见问题纪要 G001 / Refer to Issue Paper G001

1. The Chinese fuel mainly used for civil aviation is No. 3 Jet fuel (GB 6537-94). The fuel needs to be approved for the airplanes before its operation in China.
2. As per CCAR 21.29(e), All literal markings and placards on an airplane used for advising, warning, or notifying passengers must be at least in Chinese; all literal markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of emergency exits and doors and their means of opening must be at least in Chinese; and all the operation instructions of airplane emergency equipment that may be used by passengers must be at least in Chinese.
3. As per Airworthiness Management Document No. AA2002093, the pilot compartment doors and the security considerations should comply with: § 25.772 Pilot compartment doors, and  
§ 25.795 Security considerations  
交付中国的每架飞机, 必须安装满足 CAAC 要求的驾驶舱门(空客改装包 No.50014)/Each aircraft delivered in China shall be equipped with reinforced cockpit door meeting CAAC requirement(Airbus Modification No.50014)
4. Quick Access Recorder (QAR) must be installed on each aircraft (reference to CAD97-MULT-38).
5. Altimeter should display flight altitude with the metric system.

2. EASA 审查参考的申请日期/ Reference Application Date for EASA Certification:

1997 年 12 月 31 日/31 December 1997

3. EASA 审定日期(JAA 建议)/ EASA Certification Date (JAA recommendation):  
(对于 2003 年 9 月 28 日前审定的型别,DGAC-F TC 183 仍然是有效的参考 / DGAC-F TC 183 remains a valid reference for models certified before 28. September 2003)

A340-642: 2002 年 5 月 21 日/21 May 2002

A340-643: 2006 年 4 月 11 日/11 April 2006

4. EASA 审定基础/EASA Certification Basis:

- JAR 25 Change 14 plus Orange Paper 96/1

o Except JAR 25.365(g) which remains at Change 13 for the design of the

- cockpit wall.
- JAR AWO Change 2

#### 6. 专用条件/Special Conditions:

- SC F-1001 失速和预期使用速度/Stalling and scheduled operating speeds
- SC F-2 驾驶舱操纵的运动和影响/Motion and effect of cockpit controls
- SC F-1003 纵向静稳定性/Static longitudinal stability
- SC F-4 航向和横向静稳定性/SC F-4 Static directional and lateral stability
- SC F-5 飞行包线保护/SC F-5 Flight envelope protections
- SC F-6 正常载荷因子限制系统/SC F-6 Normal load factor limiting system
- SC A-1002 系统与结构的相互作用/Interaction of systems and structure
- SC A-1003 设计机动要求/Design Maneuver Requirements
- SC A-4 设计俯冲速度/SC A-4 Design dive speed
- SC A-5 限制驾驶员操纵力和扭矩/SC A-5 Limit pilot forces and torque
- SC A-1006 Grounds Loads and Conditions for Central Landing Gear
- SC P-1016 Rear Centre Tank and Tyre Burst
- SC P-1018 Engine Sustained imbalance
- SC S-10.2 外部辐射对机上系统的影响/Effects of external radiation upon aircraft systems
- SC S-1013 自动推力系统/Autothrust System
- SC S-16 控制信号完整性/Control Signal Authority
- SC S-18 电子飞行控制/Electrical Flight Control unusual features
- SC S-38 无牵引拖把牵引 /Towbarless Towing
- SC E-2 Under floor crew rest compartment (option)
- SC E-5.1 下舱面厕所/Lower deck lavatories (option)
- SC E-8.1 下舱面储藏区/Lower deck stowage compartment (option)
- SC E-11 下舱机组休息间/Bulk Crew Rest Compartment (option)
- SC E-1014 Inflatable seat belts (option)
- SC E-19 E-19F/C 滑动银幕(自 2003 年 9 月适用)/ F/C sliding screens (applicable from September 2003)
- SC O-1001 Ferrying one engine unserviceable
- SC G-7 功能及可靠性试验/Function and Reliability Testing

#### 6.Exemption (temporary):

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

#### 7. 等效安全/Equivalent Safety Findings:

- SC F-1008 加速-停止距离/Accelerate-stop distance (NPA 25BDG244)
- SC F-1014 襟翼门/Flap Gates (NPA 25B238)
- SC A-1001 修订的载荷要求/Revised Loads Requirements (NPA 25C20 and NPA 25C282)
- SC A-1011 振动, 抖振和气动弹性要求 /Vibration, Buffet and Aeroelastic Requirements (NPA 25BCD236)

SC A-1015 校验仰卧机动载荷/ Checked Pitching Maneuver Loads  
 SC A-1017 滑行刹车条件/ Braked Roll Conditions (NPA 25C-276)  
 SC A-1020 减震试验/ Shock Absorption test (NPA 25D-279)  
 SC A-1021 发动机失效载荷 / Engine Failure Loads  
 SC A-1023 持续紊流/ Continuous Turbulence  
 SC A-1024 铸造系数/ Casting Factors  
 SC A-1026 结构证明/Proof of structure  
 SC S-1021 刹车 / Brakes (partial NPA 25D-291)  
 SC S-45 滑油指示/ Oil Indication  
 SC S-148 纵向着陆性能和最小决断高度取消 /Longitudinal touch down performance and MABH deletion(NPA AWO 8)  
 SC S-1059 液压系统/Hydraulics System  
 SC S-1070 跑道目视范围/Runway visual range  
 SC P-1008 燃油箱通道口盖 / Fuel Tank Access Covers  
 SC P-1020 辅助动力装置设施/ APU Instruments (NPA 25J246)  
 SC P-1021 无滑油风车/ Windmilling without oil (NPA 25E268)  
 SC P-1022 降水和落雪 / Falling and Blowing Snow (NPA 25E288)  
  
 ESF P-1009 罗罗涡轮超温探测 /Rolls-Royce Turbine Overheat Detection  
 ESF P-1011 反推试验/Thrust Reverser Testing  
 ESF S-1065 无空调起飞/ Packs Off Operation  
 ESF S-1066 过度偏离警告/ Excess deviation alert  
 ESF E-15 Reinforced Security Cockpit Door  
 ESF E-17 Trolley Lift (applicable from November 2003)  
 ESF E-18 Lower Deck Galley Compartment (applicable from November 2003)

#### 8. 环境标准/Environmental Standards:

噪声、燃油排放及排泄物的环境要求/Environmental requirements for noise, fuel venting and emissions :

#### **A340-642 aircraft model**

国际民航组织附件 16 卷 1 第 3 章航空器噪声第三版 1993 (第六次修订)/ ICAO Annex 16 Volume 1 – Chapter 3 Aircraft noise 3<sup>rd</sup> edition 1993 (Amendment 6)

如果实施了 Mod. 55005, 则满足国际民航组织附件 16 卷 1 第 4 章 / ICAO Annex 16 Volume 1 – Chapter 4 if Mod. 55005 is embodied.

JAR 36 Aircraft noise May 1997 edition

ICAO Annex 16 Volume 2 – Emissions

#### **A340-643 aircraft model**

Environmental requirements for noise, fuel venting and emissions:

ICAO Annex 16 Volume 1 – Chapter 4.

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

ICAO Annex 16 Volume 2 - Emissions

### III.技术特性和运行限制/Technical Characteristics and Operational Limitations

四台涡轮风扇发动机、远航程、双过道的大型飞机。 / Four turbo-fan, long range, twin-aisle, large category airplane.

It differs from the A340-300 series aircraft by addition of 20 frames.

#### 1. A340-600 装 Rolls Royce 发动机/ A340-600 powered by Rolls Royce engines

##### 1.1 型号设计定义 / Type Design Definition

A340-642: EAL 415.0410/02

A340-643: F00RP0604310

##### 1.2 发动机 / Engines

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

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

##### 1.2.1 发动机限制/ Engine Limits

| 动力装置限制/ENGINE LIMITS<br>数据单/DATA SHEET 1056<br>(CAA)<br>MIM62 (DGAC)                       | A340-642<br>RB211 Trent 556-61<br>RB211 Trent 556A2-61 | A340-643<br>RB211 Trent 560A2-61 |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------|
| 海平面静推力/Static thrust at sea level:                                                         | 58,462 lbs                                             | v61902 lbs                       |
| 起飞(5 分钟)/take-off (5mn)*                                                                   | 44,359 lbs                                             | 44,359 lbs                       |
| 最大连续/maximum continuous                                                                    |                                                        |                                  |
| Approved oils: Aeroshell Turbine Oil (Royco Turbine Oil) 555<br>Mobil Jet Oil II, 254, 291 |                                                        |                                  |

/ 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".

其它发动机限制/Other engine limitations: 见相应的发动机型号合格证数据单。/See the

relevant Engine Type Certificate Data Sheet.

1.5 燃油 / Fuel

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

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

上述提及的燃油和添加剂也适用于辅助动力装置。/The above mentioned fuels and additives are also suitable for the APU.

1.4 限制速度 / Limit Speeds

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

1.5 重心范围 / Center of Gravity Range

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

1.6 最大审定重量 / Maximum Certified Weight

A340-642:

| VARIANT              | 000<br>Basic | 001<br>(50312) | 101<br>(53043) | 102<br>(54805) |
|----------------------|--------------|----------------|----------------|----------------|
| 最大起飞重量<br>/MTOW (T)  | 365          | 368            | 380            | 368            |
| 最大着陆重量<br>MLW (T)    | 256          | 259            | 265            | 259            |
| 最大零燃油重量<br>/MZFW (T) | 242          | 245            | 251            | 245            |

A340-643:

| VARIANT              | 101<br>(53043) |
|----------------------|----------------|
| 最大起飞重量/MTOW<br>(T)   | 380            |
| 最大着陆重量/MLW<br>(T)    | 265            |
| 最大零燃油重量<br>/MZFW (T) | 251            |

#### 1.7 注释/Note

##### A340-642

RB211 Trent 556-61, RB211 Trent 556A2-61 发动机可以在相同的飞机上无论编号和位置的混合使用。/ RB211 Trent 556-61, RB211 Trent 556A2-61 engines can be intermixed on the same aircraft whatever the number or the position.

#### 4. 适用于所有 A340-600 系列的数据/ Data pertinent to all A340-600 series

#### 4.2 燃油量 / Fuel Quantity(0.8 kg/liter):

A340-642 without mod 53000 and without mod 54679

| 油箱/TANK      |                       | TANK CAPACITY           |           |                                   |           |                           |       |                                     |       |
|--------------|-----------------------|-------------------------|-----------|-----------------------------------|-----------|---------------------------|-------|-------------------------------------|-------|
|              |                       | Usable fuel<br>EIS Wing |           | Usable fuel<br>LWW<br>(mod 48487) |           | Unusable fuel<br>EIS Wing |       | Unusable fuel<br>LWW<br>(mod 48487) |       |
|              |                       | liters                  | (kg)      | liters                            | (kg)      | liters                    | (kg)  | liters                              | (kg)  |
| WING         | Inner 1 / 4           | 49,002                  | (39,202)  | 49,432                            | (39,546)  | 68                        | (54)  | 48                                  | (38)  |
|              | Inner 2 / 3           | 69,514                  | (55,611)  | 69,610                            | (55,688)  | 230                       | (184) | 190                                 | (152) |
|              | Outer                 | 12,290                  | (9,832)   | 12,620                            | (10,096)  | 34                        | (27)  | 44                                  | (35)  |
|              | Total                 | 130,806                 | (104,645) | 131,662                           | (105,329) | 332                       | (265) | 282                                 | (225) |
| CENTER       |                       | 55,133*                 | (44,106)  | 55,133                            | (44,106)  | 240*                      | (192) | 240                                 | (192) |
| TRIM<br>TANK | FCMC before<br>FL 6.0 | 8,361                   | (6,689)   | 7,986                             | (6,389)   | 25                        | (20)  | 25                                  | (20)  |

|       |                          |         |           |         |           |     |       |     |       |
|-------|--------------------------|---------|-----------|---------|-----------|-----|-------|-----|-------|
|       | FCMC FL 6.0 up to FL 7.0 | 7,986   | (6,389)   |         |           |     |       |     |       |
|       | FCMC FL 7.1 onwards      | 7,886   | (6,309)   | 7,886   | (6,309)   |     |       |     |       |
| TOTAL | FCMC before FL 6.0       | 194,300 | (155,440) | 194,781 | (155,825) | 597 | (477) | 547 | (437) |
|       | FCMC FL 6.0 up to FL 7.0 | 193,925 | (155,140) |         |           |     |       |     |       |
|       | FCMC FL 7.1 onwards      | 193,825 | (155,060) | 194,681 | (155,745) |     |       |     |       |

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

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

A340-642 with mod 54679

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

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

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

| TANK   |             | TANK CAPACITY |           |               |       |
|--------|-------------|---------------|-----------|---------------|-------|
|        |             | Usable fuel   |           | Unusable fuel |       |
|        |             | liters        | (kg)      | liters        | (kg)  |
| WING   | Inner 1 / 4 | 49,178        | (39,342)  | 56            | (45)  |
|        | Inner 2 / 3 | 69,648        | (55,718)  | 220           | (176) |
|        | Outer       | 12,442        | (9,954)   | 54            | (43)  |
|        | Total       | 131,268       | (105,014) | 330           | (264) |
| CENTER |             | 55,202        | (44,161)  | 171           | (137) |
| TRIM   | Basic       | 7,886         | (6,309)   | 25            | (20)  |

|       |                                   |         |           |     |       |
|-------|-----------------------------------|---------|-----------|-----|-------|
| TANK  | Extended<br>(Mod 54382)           | 9,041   | (7,233)   | 35  | (28)  |
| TOTAL | Basic Trim Tank                   | 194,356 | (155,484) | 526 | (421) |
|       | Extended Trim Tank<br>(Mod 54382) | 195,511 | (156,408) | 536 | (429) |

#### 4.2 最小飞行机组 / Minimum Flight Crew

2 人: 驾驶员和副驾驶。 / Two (2): Pilot and Co-pilot

#### 4.3 最大座椅布局数量 / Maximum Seating Capacity

由应急撤离批准的最大乘员数为 440: /The maximum number of passengers approved for emergency evacuation is 440:

交付时每架飞机批准的最大乘员容量见客舱内部布置图。 / See interior layout drawing for the maximum passenger capacities approved for each aircraft when delivered.

#### 4.4 货舱载荷 / Cargo Compartment Loading

| 货舱/Cargo compartment | 最大载荷 (公斤) / Maximum load (kg) |
|----------------------|-------------------------------|
| 前/Forward            | 30482                         |
| 后/Aft                | 22861                         |
| 最后 (散装) /Rear (bulk) | 3 468                         |

关于集装箱、集装板及相关重量的授权的每一位置和装载条件, 见《重量平衡手册》章节 1.10。 / For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weights), see Weight and Balance Manual Chapter 1.10 ref.:

00F080A0601/C6S

#### 4.5 环境飞行包线 / Environmental Flight Envelope

参见经批准的《飞机飞行手册》。 /Refer to approved airplane Flight Manuals

#### 4.6 其它限制 / Other Limitations

参见经批准的《飞机飞行手册》。 /Refer to approved airplane Flight Manuals

#### 4.7 辅助动力装置 (APU) / Auxiliary Power Unit (APU)

一台 GARRET AIRESEARCH GTCP 331-350C 型(规范 31-7677A / Specification 31-7677A)。 / One GARRETT GTCP 331-350C (Specification 31-7677A)

滑油: 参见适用的经批准的手册 / Oils: refer to applicable approved Manuals

#### 4.8 设备 / Equipment

应安装适用条款要求的设备。/The equipment required by the applicable requirements shall be installed.

客舱设施，设备和布置应符合下述规范。/Cabin furnishings, equipment and arrangement shall conform to the following specification:

00F252K0005/C01 客舱座椅/for cabin seats

00F252K0006/C01 厨房/for galley

00F252K0020/C01 客舱乘务员座椅/for cabin attendant seats

#### 4.9 全部气象能力 / All Weather Capacities

##### **A340-642:**

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

##### **A340-643:**

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

#### 4.10 机轮和轮胎 / Wheels and Tyres

参见空客服务公告/ Refer to Airbus Service Bulletin 。

#### 4.11 液压 / Hydraulics

液体规范: IV 型 - 《NSA 307-110》。/ Fluid specifications: TYPE IV (NSA 307-110).

#### 4.12 维护要求和适航限制 / Maintenance Instructions and Airworthiness Limitations

- 适用于安全寿命适航限制项的限制部分见 EASA 批准的 A340 适航限制部分 (ALS), 1-2 分部和 1-3 分部 (Document 00F050AM091/C01) / 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 (Document 00F050AM091/C01);
- 适用于损伤容限适航限制项的限制部分见 EASA 批准的 A340 适航限制部分 (ALS), 第 2 部分 (Document 00F050A3401/C01) / Limitations applicable to Damage Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) Part 2 approved by EASA (Document 00F050A3401/C01);
- 审定维修要求见 EASA 批准的 A340 适航限制部分 (ALS), 第 3 部分 ( Document 00F050A0003/C01 ) / Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA (Document 00F050A0003/C01);
- Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5 approved by EASA (Document 00F050A0009/C01);
- MRB 报告 00F050A0002/C01 / Maintenance Review Board report 00F050A0002/C01.

## 第二节:A340-500 系列/ Airbus A340-500

### I. 概述 / GENERAL

#### 1. 机型/Aeroplane:

Airbus A340-500

### II. 认可审定基础/ Validation Basis

#### 1.认可审定基础/ Validation Basis

中国民用航空总局的认可审定基础为/ Validation Basis:

1.1 欧洲联合适航当局的合格审定基础: / CAAC accepts the Certification Basis of EASA as the Validation Basis:

1.2 CAAC 的附加要求/ CAAC Additional Requirement:

参见问题纪要 G001 / Refer to Issue Paper G001

1.The Chinese fuel mainly used for civil aviation is No. 3 Jet fuel (GB 6537-94). The fuel needs to be approved for the airplanes before its operation in China.

2.As per CCAR 21.29(e), All literal markings and placards on an airplane used for advising, warning, or notifying passengers must be at least in Chinese; all literal markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of emergency exits and doors and their means of opening must be at least in Chinese; and all the operation instructions of airplane emergency equipment that may be used by passengers must be at least in Chinese.

3.As per Airworthiness Management Document No. AA2002093, the pilot compartment doors and the security considerations should comply with: § 25.772 Pilot compartment doors, and

§ 25.795 Security considerations

交付中国的每架飞机，必须安装满足 CAAC 要求的驾驶舱门(空客改装包 No.50014)/Each aircraft delivered in China shall be equipped with reinforced cockpit door meeting CAAC requirement(Airbus Modification No.50014)

4.Quick Access Recorder (QAR) must be installed on each aircraft (reference to CAD97-MULT-38).

5.Altimeter should display flight altitude with the metric system.

2. EASA 审查参考的申请日期/ Reference Application Date for EASA Certification:

1997 年 12 月 31 日/31 December 1997

3. EASA 审定日期(JAA 建议)/ EASA Certification Date (JAA recommendation):  
(对于 2003 年 9 月 28 日前审定的型别, DGAC-F TC 183 仍然是有效的参考 / DGAC-F TC 183 remains a valid reference for models certified before 28. September 2003)

A340-541: 2002 年 12 月 3 日 /03  
December 2002

A340-542 2007 年 2 月 15 日/15 February  
2007

4. EASA 审定基础/EASA Certification Basis:

- JAR 25 Change 14 plus Orange Paper 96/1

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

JAR AWO Change 2

5. 专用条件/Special Conditions:

- SC F-1001 失速和预期使用速度/Stalling and scheduled operating speeds
- SC F-2 驾驶舱操纵的运动和影响/Motion and effect of cockpit controls
- SC F-1003 纵向静稳定性/Static longitudinal stability
- SC F-4 航向和横向静稳定性/SC F-4 Static directional and lateral stability
- SC F-5 飞行包线保护/SC F-5 Flight envelope protections
- SC F-6 正常载荷因子限制系统/SC F-6 Normal load factor limiting system
- SC A-1002 系统与结构的相互作用/Interaction of systems and structure
- SC A-1003 设计机动要求/Design Maneuver Requirements
- SC A-4 设计俯冲速度/SC A-4 Design dive speed
- SC A-5 限制驾驶员操纵力和扭矩/SC A-5 Limit pilot forces and torque
- SC A-1006 Grounds Loads and Conditions for Central Landing Gear
- SC P-1016 Rear Centre Tank and Tyre Burst
- SC P-1018 Engine Sustained imbalance
- SC S-10.2 外部辐射对机上系统的影响/Effects of external radiation upon aircraft systems
- SC S-1013 自动推力系统/Autothrust System
- SC S-16 控制信号完整性/Control Signal Authority
- SC S-18 电子飞行控制/Electrical Flight Control unusual features
- SC S-38 无牵引拖把牵引 /Towbarless Towing
- SC E-2 Under floor crew rest compartment (option)
- SC E-5.1 下舱面厕所/Lower deck lavatories (option)
- SC E-8.1 下舱面储藏区/Lower deck stowage compartment (option)
- SC E-11 下舱机组休息间/Bulk Crew Rest Compartment (option)
- SC E-1014 Inflatable seat belts (option)
- SC E-19 E-19F/C 滑动银幕(自 2003 年 9 月适用)/ F/C sliding screens (applicable from September 2003)
- SC O-1001 Ferrying one engine unserviceable
- SC G-7 功能及可靠性试验/Function and Reliability Testing

6.Exemption (temporary):

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

7. 等效安全/Equivalent Safety Findings:

- SC F-1008 加速-停止距离/Accelerate-stop distance (NPA 25BDG244)
- SC F-1014 襟翼门/Flap Gates (NPA 25B238)

SC A-1001 修订的载荷要求/Revised Loads Requirements (NPA 25C20 and NPA 25C282)

SC A-1011 振动，抖振和气动弹性要求/Vibration, Buffet and Aeroelastic Requirements (NPA 25BCD236)

SC A-1015 校验仰卧机动载荷/ Checked Pitching Maneuver Loads

SC A-1017 滑行刹车条件/ Braked Roll Conditions (NPA 25C-276)

SC A-1020 减震试验/ Shock Absorption test (NPA 25D-279)

SC A-1021 发动机失效载荷 / Engine Failure Loads

SC A-1023 持续紊流/ Continuous Turbulence

SC A-1024 铸造系数/ Casting Factors

SC A-1026 结构证明/Proof of structure

SC S-1021 刹车 / Brakes (partial NPA 25D-291)

SC S-45 滑油指示/ Oil Indication

SC S-148 纵向着陆性能和最小决断高度取消 /Longitudinal touch down performance and MABH deletion(NPA AWO 8)

SC S-1059 液压系统/Hydraulics System

SC S-1070 跑道目视范围/Runway visual range

SC P-1008 燃油箱通道口盖 / Fuel Tank Access Covers

SC P-1020 辅助动力装置设施/ APU Instruments (NPA 25J246)

SC P-1021 无滑油风车/ Windmilling without oil (NPA 25E268)

SC P-1022 降水和落雪 / Falling and Blowing Snow (NPA 25E288)

ESF P-1009 罗罗涡轮超温探测 /Rolls-Royce Turbine Overheat Detection

ESF P-1011 反推试验/Thrust Reverser Testing

ESF S-1065 无空调起飞/ Packs Off Operation

ESF S-1066 过度偏离警告/ Excess deviation alert

ESF E-15 Reinforced Security Cockpit Door

ESF E-17 Trolley Lift (applicable from November 2003)

ESF E-18 Lower Deck Galley Compartment (applicable from November 2003)

#### 8. 环境标准/Environmental Standards:

##### **A340-541 aircraft model**

噪声、燃油排放及排泄物的环境要求/Environmental requirements for noise, fuel venting and emissions :

国际民航组织附件 16 卷 1 第 3 章航空器噪声第三版 1993 (第六次修订)/ ICAO Annex 16 Volume 1 – Chapter 3 Aircraft noise 3<sup>rd</sup> edition 1993 (Amendment 6)

如果实施了 Mod. 55005, 则满足国际民航组织附件 16 卷 1 第 4 章 / ICAO Annex 16 Volume 1 – Chapter 4 if Mod. 55005 is embodied.

JAR 36 Aircraft noise May 1997 edition

**A340-542 aircraft model**

Environmental requirements for noise, fuel venting and emissions:

ICAO Annex 16 Volume 1 – Chapter 4.

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

ICAO Annex 16 Volume 2 - Emissions

III.技术特性和运行限制/Technical Characteristics and Operational Limitations

四台涡轮风扇发动机、远航程、双过道的大型飞机。 / Four turbo-fan, long range, twin-aisle, large category airplane.

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

1. A340-500 装 Rolls Royce 发动机/ A340-500 powered by Rolls Royce engines

1.1 型号设计定义 / Type Design Definition

A340-541: EAL 415.1094/02

A340-542: EAL F01M06010396

1.2 发动机 / Engines

A340-541: 4 台 Rolls Royce RB211 Trent 553-61 或 RB211 Trent 553A2-61 涡轮发动机 / Four (4) Rolls Royce RB211 Trent 553-61 or RB211 Trent 553A2-61 turbofan engines

A340-542: 4 台 Rolls Royce RB211 Trent 556A2-61 涡轮发动机 / Four (4) Rolls Royce RB211 Trent 556A2-61 turbofan engines

1.2.1 发动机限制/ Engine Limits

| 动力装置限制/ENGINE LIMITS<br>数据单/DATA SHEET 1056<br>(CAA)<br>MIM62 (DGAC) | A340-541<br>RB211 Trent 553-61<br>RB211 Trent 553A2-61 | A340-542<br>RB211 Trent 556A2-61 |
|----------------------------------------------------------------------|--------------------------------------------------------|----------------------------------|
| 海平面静推力/Static thrust at sea level:                                   | 55,780 lbs                                             | 58,462 lbs                       |
| 起飞(5 分钟)/take-off (5mn)*                                             | 44,359 lbs                                             | 44,359 lbs                       |
| 最大连续/maximum continuous                                              |                                                        |                                  |

|                                                                                            |
|--------------------------------------------------------------------------------------------|
| Approved oils: Aeroshell Turbine Oil (Royco Turbine Oil) 555<br>Mobil Jet Oil II, 254, 291 |
|--------------------------------------------------------------------------------------------|

/ 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".

其它发动机限制/Other engine limitations: 见相应的发动机型号合格证数据单。/See the relevant Engine Type Certificate Data Sheet.

#### 1.7 燃油 / Fuel

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

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

上述提及的燃油和添加剂也适用于辅助动力装置。/The above mentioned fuels and additives are also suitable for the APU.

#### 1.4 限制速度 / Limit Speeds

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 1.5 重心范围 / Center of Gravity Range

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 1.8 最大审定重量 / Maximum Certified Weight

##### **A340-541:**

| VARIANT  | 000<br>(51000) | 001<br>(51080) | 002<br>(50791) | 003<br>(54237) | 101<br>(53039) | 102<br>(54806) | 103<br>(54642) |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| MTOW (T) | 368            | 372            | 372            | 374            | 380            | 372            | 372            |
| MLW (T)  | 240            | 243            | 243            | 231            | 246            | 243            | 246            |
| MZFW (T) | 225            | 230            | 229            | 218            | 232            | 230            | 232            |

**A340-542**

| <b>VARIANT</b> | <b>101<br/>(53039)</b> | <b>102<br/>(54806)</b> | <b>103<br/>(55642)</b> |
|----------------|------------------------|------------------------|------------------------|
| MTOW (T)       | 380                    | 372                    | 372                    |
| MLW (T)        | 246                    | 243                    | 246                    |
| MZFW (T)       | 232                    | 230                    | 232                    |

## 1.7 注释/Note A340-541

RB211 Trent 553-61, RB211 Trent 553A2-61 发动机可以在相同的飞机上无论编号和位置的混合使用。 / RB211 Trent 553-61, RB211 Trent 553A2-61 engines can be intermixed on the same aircraft whatever the number or the position.

## 4. 适用于所有 A340-500 系列的数据 / Data pertinent to all A340-500 series

## 4.3 燃油量 / Fuel Quantity(0.8 kg/liter):

A340-541 without mod 53000

| <b>TANK</b>                        |                              | <b>TANK CAPACITY</b>            |             |                                            |             |                                   |             |                                              |             |
|------------------------------------|------------------------------|---------------------------------|-------------|--------------------------------------------|-------------|-----------------------------------|-------------|----------------------------------------------|-------------|
|                                    |                              | <b>Usable fuel<br/>EIS Wing</b> |             | <b>Usable fuel<br/>LWW<br/>(Mod 48487)</b> |             | <b>Unusable fuel<br/>EIS Wing</b> |             | <b>Unusable fuel<br/>LWW<br/>(Mod 48487)</b> |             |
|                                    |                              | <b>liters</b>                   | <b>(kg)</b> | <b>liters</b>                              | <b>(kg)</b> | <b>liters</b>                     | <b>(kg)</b> | <b>liters</b>                                | <b>(kg)</b> |
| <b>WING</b>                        | Inner 1 / 4                  | 49,002                          | (39,202)    | 49,432                                     | (39,546)    | 68                                | (54)        | 48                                           | (38)        |
|                                    | Inner 2 / 3                  | 69,514                          | (55,611)    | 69,610                                     | (55,688)    | 230                               | (184)       | 190                                          | (152)       |
|                                    | Outer                        | 12,290                          | (9,832)     | 12,620                                     | (10,096)    | 34                                | (27)        | 44                                           | (35)        |
|                                    | Total                        | 130,806                         | (104,645)   | 131,662                                    | (105,330)   | 332                               | (265)       | 282                                          | (225)       |
| <b>CENTER</b>                      |                              | 55,133                          | (44,106)    | 55,133                                     | (44,106)    | 240                               | (192)       | 240                                          | (192)       |
| <b>REAR<br/>CENTER<br/>5 FRAME</b> | Without liner<br>(Mod 51344) | 19,873                          | (15,898)    | 19,873                                     | (15,898)    | 10                                | (8)         | 10                                           | (8)         |
|                                    | With liner<br>(Mod 51344)    | 19,741                          | (15,793)    | 19,741                                     | (15,793)    | 100                               | (80)        | 100                                          | (80)        |
| <b>REAR CENTER<br/>7 FRAME</b>     |                              | Doesn't exist                   |             | 27,329                                     | (21,863)    | Doesn't exist                     |             | 241                                          | (193)       |
| <b>TRIM<br/>TANK</b>               | FCMC FL 7.1<br>onwards       | 7,886                           | (6,309)     | 7,886                                      | (6,309)     | 25                                | (20)        | 25                                           | (20)        |

|                                |                              |               |           |         |           |               |       |     |       |
|--------------------------------|------------------------------|---------------|-----------|---------|-----------|---------------|-------|-----|-------|
| TOTAL<br>(with RCT<br>5 Frame) | Without liner<br>(Mod 51344) | 213,698       | (170,958) | 214,554 | (171,643) | 597           | (485) | 557 | (445) |
|                                | With liner<br>(Mod 51344)    | 213,566       | (170,853) | 214,422 | (171,538) | 697           | (557) | 647 | (517) |
| TOTAL<br>(with RCT 7 Frame)    |                              | Doesn't exist |           | 222,010 | (177,608) | Doesn't exist |       | 788 | (630) |

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

A340-541 **with mod 53000**, A340-542

| TANK                                                  |             | TANK CAPACITY |           |               |       |
|-------------------------------------------------------|-------------|---------------|-----------|---------------|-------|
|                                                       |             | Usable fuel   |           | Unusable fuel |       |
|                                                       |             | liters        | (kg)      | liters        | (kg)  |
| WING                                                  | Inner 1 / 4 | 49,178        | (39,342)  | 56            | (45)  |
|                                                       | Inner 2 / 3 | 69,648        | (55,718)  | 220           | (176) |
|                                                       | Outer       | 12,442        | (9,954)   | 54            | (43)  |
|                                                       | Total       | 131,268       | (105,014) | 330           | (264) |
| CENTER                                                |             | 55,202        | (44,161)  | 171           | (137) |
| REAR<br>CENTER<br>5 FRAME                             | With liner  | 19,741        | (15,793)  | 100           | (80)  |
| TRIM<br>TANK                                          | Extended    | 9,041         | (7,233)   | 35            | (28)  |
| TOTAL<br>(With Extended trim tank and<br>RCT 5 Frame) |             | 215,252       | (172,201) | 636           | (509) |

#### 4.2 最小飞行机组 / Minimum Flight Crew

2 人：驾驶员和副驾驶。 / Two (2): Pilot and Co-pilot

#### 4.3 最大座椅布局数量 / Maximum Seating Capacity

由应急撤离批准的最大乘员数为 375: /The maximum number of passengers approved for emergency evacuation is 375:

交付时每架飞机批准的最大乘员容量见客舱内部布置图。 / See interior layout drawing for the maximum passenger capacities approved for each aircraft when delivered.

#### 4.4 货舱载荷 / Cargo Compartment Loading

| 货舱/Cargo compartment | 最大载荷（公斤）/ Maximum load (kg) |
|----------------------|-----------------------------|
| 前/Forward            | 24,494                      |
| 后/Aft                | 16,330                      |
| 最后（散装）/Rear (bulk)   | 3,458                       |

关于集装箱、集装板及相关重量的授权的每一位置和装载条件，见《重量平衡手册》章节 1.10。/ For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weights), see Weight and Balance Manual Chapter 1.10 ref.:

00F080A0501/C5S for A340-541 and A340-542

#### 4.5 环境飞行包线 / Environmental Flight Envelope

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 4.6 其它限制 / Other Limitations

参见经批准的《飞机飞行手册》。/Refer to approved airplane Flight Manuals

#### 4.7 辅助动力装置(APU) / Auxiliary Power Unit (APU)

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

滑油：参见适用的经批准的手册 / Oils: refer to applicable approved Manuals

#### 4.8 设备 / Equipment

应安装适用条款要求的设备。/The equipment required by the applicable requirements shall be installed.

客舱设施，设备和布置应符合下述规范。/Cabin furnishings, equipment and arrangement shall conform to the following specification:

00F252K0005/C01 客舱座椅/for cabin seats

00F252K0006/C01 厨房/for galley

00F252K0020/C01 客舱乘务员座椅/for cabin attendant seats

#### 4.9 全部气象能力 / All Weather Capacities

##### **A340-541:**

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

##### **A340-542:**

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

#### 4.10 机轮和轮胎 / Wheels and Tyres

参见空客服务公告/ Refer to Airbus Service Bulletin 。

#### 4.11 液压 / Hydraulics

液体规范: IV 型 - 《NSA 307-110》。/ Fluid specifications: TYPE IV (NSA 307-110).

#### 4.12 维护要求和适航限制 / Maintenance Instructions and Airworthiness Limitations

- 适用于安全寿命适航限制项的限制部分见 EASA 批准的 A340 适航限制部分 (ALS), 1-2 分部和 1-3 分部 (Document 00F050AM091/C01) / 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 (Document 00F050AM091/C01);
- 适用于损伤容限适航限制项的限制部分见 EASA 批准的 A340 适航限制部分 (ALS), 第 2 部分 (Document 00F050A3401/C01) / Limitations applicable to Damage Tolerant Airworthiness Limitation Items are provided in the A340 Airworthiness Limitations Section (ALS) Part 2 approved by EASA (Document 00F050A3401/C01);
- 审定维修要求见 EASA 批准的 A340 适航限制部分 (ALS), 第 3 部分 ( Document 00F050A0003/C01 ) / Certification Maintenance Requirements are provided in the A340 Airworthiness Limitations Section (ALS) Part 3 approved by EASA (Document 00F050A0003/C01);
- Fuel Airworthiness Limitations are provided in the A340 Airworthiness Limitations Section (ALS) Part 5 approved by EASA (Document 00F050A0009/C01);
- MRB 报告 00F050A0002/C01 / Maintenance Review Board report 00F050A0002/C01.