

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No: VTC0087A

版次/Revision: 4

型号/Type:

型别/Model:

AS332 C/C1/L/L1

EC225 LP

批准人/Approved By:

徐超群

职务/Title: Director General of CAAC-AAD

日期/Date: 2019 年 03 月 06 日

本数据单是型号认可证（编号：VTC0087A）的组成部分，它规定了符合中国民用航空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: VTC0087A), 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:

空中客车直升机公司

Airbus Helicopters

Aéroport International Marseille-Provence

13725 MARIGNANE cedex

France

目录 / Contents

第1节总则/ SECTION 1: GENERAL 3

第2节/SECTION 2: AS 332 C, AS 332 C1, AS 332 L1 5

 I. 总则/General 5

 II. 认可审定基础/Validation Certification Basis..... 6

 III.技术特征和运行限制/Technical Characteristics and Operational Limitations..... 7

 IV.使用 and 维修技术资料/Operating and Service Instructions..... 13

 V. 注释/Notes 14

第3节/SECTION 3: AS 332 L 20

 I. 总则/General 20

 II. 认可审定基础/Validation Certification Basis..... 21

 III.技术特征和运行限制/Technical Characteristics and Operational Limitations..... 21

 IV.使用 and 维修技术资料/Operating and Service Instructions..... 24

 V. 注释/Notes 25

第4节/SECTION 4: EC 225 LP 26

 I. 总则/General 26

 II. 认可审定基础/Validation Certification Basis..... 26

 III.技术特征和运行限制/Technical Characteristics and Operational Limitations..... 28

 IV.使用 and 维修技术资料/Operating and Service Instructions..... 34

 V. 注释/Notes 35

第 1 节：总则/SECTION 1: GENERAL

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

	中国民用航空局认可数据单号、版次和颁发日期 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 Type Certificate Data Sheet Number, Revision and issuance date		
当前 Current	VTC0087A	Revision:4	2019-03-06	EASA.R.002	Issue 15	10 December 2015 AS 332 C, C1, L1
历史 History	VTC0087A	Revision:3	2015-07-06	EASA.R.002	Issue 06	09 May 2010
	VTC0087A	Revision:2	2010-09-16	EASA.R.002	Issue 06	09 May 2010
	VTC0087A	Revision:1	2007-11-16	EASA.R.002	Issue 02	21 April 2006
	VTC0087A	Revision:0	1998-12-15	DGAC-F n° 127	Issue 09	September 1994

2. 类别/Category

大型旋翼航空器, A 类和 B 类

Large Rotorcraft, Category A and B

3. 认可当局/Validation Authority 审定当局/Certifying Authority

中国民用航空局/CAAC
欧洲航空局/EASA

4. 型号合格证 Type Certificate Number

EASA.R.002

型号合格证持有人/Type Certificate Holder

Airbus Helicopters
Aéroport International Marseille-Provence
13725 MARIGNANE cedex - France

型号合格证持有人记录

Type Certificate Holder Record

2014 年 2 月 27 日前/Before February 27, 2014:

欧洲直升机公司/Eurocopter
Aéroport International Marseille - Provence
13725 Marignane cedex
France

5. 认可审定基础/Validation Certification Basis

CAAC 的认可审定基础由 EASA 的审定基础(详见 EASA 型号合格证数据单: 编号 No.: R.002), 和 CAAC 的附加技术条件组成。

The CAAC validation certification basis consists of the EASA certification basis (refer to EASA Type Certificate Data Sheet No.: R.002), and the CAAC additional technical conditions.

CAAC Special Requirements:

交付到中国的每一旋翼航空器须满足下述特殊要求:

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

(1) 必须满足中国民用航空局的运行要求(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) 必须批准在本型航空器上使用中国国标 3 号燃油。Usage of PRC National Standard No.3 Jet Fuel must be approved on this type of aircraft.

(3) 在每一航空器上必须安装 CVFDR (中国适航指令 CAD-97-MULT-38 要求安装快速存储记录器 (QAR) 或其等效设备, CVFDR 满足上述适航指令要求)。CVFDR must be installed on each aircraft (CVFDR is found satisfactory to ensure compliance with CAD97-MULT-38, requiring installation of a Quick Access Recorder (QAR) or equivalent).

(4) 为具备在中国运行的资格, 按本型号认可证制造的每架直升机必须具有一份出口适航证, 其上签注有出口国适航当局的审定声明, 即: 本架航空器符合 CAAC 所批准的型号设计并处于可安全运行的状态。To be considered eligible for operation in China, each helicopter manufactured under this Validation of Type Certificate must be accompanied by a certificate of airworthiness for export endorsed by the DGAC which states (in English language): This aircraft conforms to its CAAC type design and is in a condition for safe operation.

注释: 要求 (3) 只适用于 EC225 LP。

Note: The requirement in (3) is only applicable for EC225 LP.

第 2 节/SECTION 2: AS 332 C, AS 332 C1, AS 332 L1

I. 总则/General

1. 型号/衍生型或型别

Type / Variant or Model

(a) 型号/Type

AS 332

(b) 衍生型或型别 Variant or Model

AS 332 C, AS 332 C1, AS 332 L1

2. 适航类别

大型旋翼航空器, A 类和 B 类

Airworthiness Category

Large Rotorcraft, Category A and B

3. 制造商

Manufacturer

1992 年 1 月 1 日以前/before January 1, 1992:

AEROSPATIALE

1992 年 1 月 1 日以后/after January 1, 1992:

Eurocopter

2014 年 1 月 7 日以后/after January 07, 2014:

Airbus Helicopters

Aéroport International Marseille-Provence

13725 MARIGNANE cedex - France

4. 型号合格证持有人

Type Certificate Holder

Airbus Helicopters

Aéroport International Marseille-Provence

13725 MARIGNANE cedex – France

5. EASA 审定申请日期 (向法国民航局)

EASA Certification Application Date (to DGAC-F)

AS 332 C

1978 年 4 月 4 日/04 April 1978

AS 332 C1 and L1

1984 年 6 月 18 日/18 June 1984

6. 国家审定当局

National Certifying Authority

法国民航局

DGAC-F

7. 国外适航当局型号合格审定日期

Foreign Authority Type Certification Date:

AS 332 C

1981 年 4 月 24 日/24 April 1981

AS 332 C1 and L1

1985 年 3 月 14 日/14 March 1985

(DGAC-F 国家型号合格证编号 56/ DGAC-F National TC No. 56)

8. 申请 CAAC 认可的日期

CAAC Validation Application Date

AS 332 C, AS332 C1

2016 年 10 月 13 日/ 13 October 2016

AS 332L1

1998 年 5 月 25 日/ 25 May 1998

9. CAAC 批准日期

CAAC approved Date

AS 332 C

2019-03-06

AS 332 C1

2019-03-06

AS 332 L1

1998-12-15

10. 产品有效性/Series Nos. Eligible

对于申请 CAAC 审定的每一架直升机，其出口适航证上都必须由 DGAC 按下列“进口要求”予以签注。

A DGAC “Certificate de Navigabilite pour Exportation” endorsed as noted below under “Import Requirements” must be submitted for each individual helicopter for which application for CAAC certification is made.

11. 进口要求/Import Requirements

为具备在中国运行的资格，按本型号认可证制造的每架直升机必须具有一份出口适航证，其上签注有出口国适航当局的审定声明，即：本架航空器符合 CAAC 所批准的型号设计并处于可安全运行的状态。

To be considered eligible for operation in China, each helicopter manufactured under this Validation of Type Certificate must be accompanied by a certificate of airworthiness for export endorsed by the DGAC which states (in English language): This aircraft conforms to its CAAC type design and is in a condition for safe operation.

12. 资料批准/Service Information

CAAC 接受，注明有 DGAC 批准或 DGAC-DOA No. F.JA.01 批准字样的服务通告、结构修理手册、航空器飞行手册、主维护手册和航空器维护手册等使用维护资料。DGAC 的这些批准代表了 CAAC 的批准且仅限于本型号设计。

Service bulletins, structural repair manuals, aircraft Flight Manuals, master servicing manual, and aircraft maintenance manuals which contain a statement that the document is DGAC approved or approved under DGAC Design Organization Approval No. F.JA.01, are accepted by the CAAC and are considered CAAC-approved. These approvals pertain to the type design only.

II. 认可审定基础/Validation Certification Basis

CAAC 的认可审定基础由 EASA 审定基础中和 CAAC 的附加技术条件组成。

The CAAC validation basis is consists of the EASA certification basis and the CAAC additional technical conditions.

EASA 审定基础/EASA certificate basis

详见 EASA 型号合格证数据单 No.: R.002 (版本 15) 中的 AS 332 C、AS 332 C1、AS 332 L1 型别的审定基础。/ Refer to EASA Type Certificate Data Sheet No.: R.002 Issue 15.

CAAC 附加技术条件/CAAC Additional Technical Conditions

- (1) 依据 CCAR21.29 (五)，有关适航规章、噪声规定所要求的手册、标牌、目录清单和仪表标记应当用中文或英文书写，下列各项应当至少有中文表述。

As per CCAR21.29 (5), the manuals, placards, listings and instrument markings required by the applicable airworthiness regulation, noise requirements, are presented in Chinese or

English language. Below items must be at least in Chinese language.

(a) 机上所有对旅客进行提示、警告和通知的文字标记和标牌。

All literal markings and placards on an airplane used for indicating, warning and informing passengers.

(b) 机上所有向旅客或者机外营救人员指示应急出口和门的位置以及开启方法的文字标记和标牌。

All literal markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of doors and their means of opening.

(c) 旅客可能使用的机上所有应急设备的操作、使用说明。

The operation and use instructions of emergency equipment which passengers will use.

(2) 燃油应符合“GB6537-2006 中国国标 3 号喷气燃料”规范要求。

Fuel conforming to Specification “GB6537-2006 No.3 Jet Fuel”.

III. 技术特征和运行限制/Technical Characteristics and Operational Limitations

1. 型号设计定义

Type Design Definition

1.1 AS 332 C 根据文件 332A04.0009 和针对 8350 公斤构型的文件 332A04.3269 中列出的更改。
as per document 332A04.0009 and modifications list in doc. 332A04.3269 for 8,350kg.

AS 332 C 根据 8600 公斤构型的文件 332A04.3300。
as per doc. 332A04.3300 for 8,600kg.

AS 332 C1, L1 根据 8600 公斤构型的文件 332A04.3305。
as per doc. 332A04.3305 for 8,600kg.

1.2 安装了 AHCAS 的 AS 332 C1 和 L1（商用名称为 AS332C1e 和 AS332L1e），参见注释 8。

AS332C1 and L1 equipped with AHCAS (commercial reference AS332C1e and AS332L1e), Refer to Note 8.

1.3 中文标牌和标识 中文标牌和标识包含在文件 332ABN0164 E 版。
Chinese Placards Chinese Placards and markings are included in Document 332ABN0164
and marking Issue E.

2. 描述 大型双发直升机；作为以前的型号合格证 SA330 型别的衍生产品，以两种机身长度构型为特点（标准型对应 AS 332 C、C1 版本，机身加长型对应 AS 332 L1 版本），双发动机构型（MAKILA 1A 对应 AS 332 C 以及 MAKILA 1A1 对应 AS 332 C1、L1）。

Large twin-engine helicopter; designed as a derivative product of the former type certified SA 330 models, that features two fuselage length configurations (standard for AS 332 C, C1 versions and extended body for AS 332 L1) and two engines configurations (MAKILA 1A for AS 332 C and MAKILA 1A1 for AS 332 C1, L1).

3. 设备

Equipment

均符合适用的 FAR 29 部适航要求并参见批准的飞行手册。

As per compliance with applicable FAR 29 airworthiness requirements and referenced within approved Flight Manual.

4. 尺寸

Dimensions

4.1 机身/Fuselage

AS 332 C, C1

长 15.53 米/Length 15.53m

宽 3.79 米/Width 3.79m

高 4.94 米/Height 4.94m

AS 332 L1

长 16.29 米/Length 16.29m

宽 3.79 米/Width 3.79m

高 4.95 米/Height 4.95m

4.2 主旋翼/Main Rotor

4 桨叶, 直径 15.6 米/4 blades Diameter 15.60m

4.3 尾旋翼/Tail Rotor

5 桨叶, 直径 3.05 米/5 blades Diameter 3.05m

5. 发动机/Engine

5.1 型别/Mode

AS 332 C

2 Turboméca MAKILA 1A

AS 332 C1, L1

2 Turboméca MAKILA 1A1

5.2 型号合格证/Type Certificate

EASA 发动机 TCDS No: E.072

EASA engine TCDS No: E.072

5.3 认可型号合格证/Validation Type Certificate

CAAC 型号认可证编号: VTC0125E, 认可数据单版次 1

CAAC VTC No. VTC0125E, VTCDS Revision 1

5.4 限制/Limitations

5.4.1 安装的发动机限制

Installed Engine Limits

参见批准的飞行手册

Refer to approved Flight Manual

5.4.2 传动装置扭矩限制

Transmission Torque Limits

参见批准的飞行手册

Refer to approved Flight Manual

6. 液体 (燃油/润滑油/添加剂)

Fluids (Fuel/ Oil/ Additives)

6.1 燃油/Fuel

参见批准的飞行手册

Refer to approved Flight Manual

6.2 润滑油/Oil

参见批准的飞行手册

Refer to approved Flight Manual

6.3 添加剂/Additives

参见批准的飞行手册

Refer to approved Flight Manual

7. 液体容量

Fluid capacities

7.1 燃油/Fuel

AS 332 C, C1

标准构型

1556 升 (411 美制加仑)

带选装的机内 6 号油箱

324 升 (86 美制加仑)

带选装的安定翼油箱

650 升 (172 美制加仑)

总计

2530 升 (669 美制加仑)

AS 332 C, C1

standard configuration

1,556 l (411 US gals)

with optional internal 6th tank

324 l (86 US gals)

with optional sponson tanks

650 l (172 US gals)

Total available

2,530 l (669 US gals)

AS 332 L1

标准构型

2043 升 (540 美制加仑)

带选装的机内 6 号油箱

324 升 (86 美制加仑)

带选装的安定翼油箱

600 升 (158 美制加仑)

总计

3017 升 (738 美制加仑)

AS 332 L1

standard configuration

2,043 l (540 US gals)

with optional internal 6th tank

324 l (86 US gals)

with optional sponson tanks

600 l (158 US gals)

Total available

3,017 l (738 US gals)

其它批准的选装油箱构型和不可用燃油容量见飞行手册。

see Flight Manual for other approved optional fuel tanks configurations and for unusable fuel quantities.

7.2 滑油/Oil

发动机/Engines

2 × 7.6 升/l

主减速器/MGB

19.6 升/l

中间减速器/IGB 0.62 升/l
尾减速器/TGB 1.44 升/l

8. 空速限制

Air Speeds Limits

Vne 有动力: M ≤ 8350 公斤 (18410 磅), 国际标准大气海平面 310 千米/小时 (167 节)
Vne Power On: 310km/h (167kt) at ISA sea Level for M ≤ 8,350kg (18,410 lb.)

M >8350 公斤 (18410 磅), 国际标准大气海平面 278 千米/小时 (150 节)
278 km/h (150 kt) at ISA sea Level for M > 8,350kg (18,410 lb.)

Vne 无动力: M ≤ 8350 公斤 (18410 磅), 国际标准大气海平面 278 千米/小时 (150 节)
Vne Power Off: 278 km/h (150 kt) at ISA sea Level for M ≤ 8,350kg (18,410 lb.)

M >8350 公斤 (18410 磅), 国际标准大气海平面 268 千米/小时(145 节)
268 km/h (145 kt) at ISA Sea Level for M> 8,350kg (18,410 lb.)

9. 旋翼转速限制

Rotor Speed Limits

有动力	最大/Maximum	275 rpm
Power On	正常/Nominal	265 rpm
	最小/Minimum	245 rpm
	最小瞬间/Min Transient	220 rpm
无动力	最大瞬间/Max Transient	310 rpm (20 sec)
Power Off	最大/Maximum	290 rpm
	最小/Minimum	245 rpm (IAS > 100kt)
		220 rpm (IAS < 100kt)

10. 最大运行高度和温度

Maximum Operating Altitude and Temperature

10.1 高度- AS332C

Altitude - AS332C

起飞和着陆/Take-off and landing

重量≤ 8350 公斤 (18410 磅), 15000 英尺压力高度
15,000ft pressure altitude for M ≤ 8,350 kg (18,410 lb.)

重量> 8350 公斤 (18410 磅), 6000 英尺压力高度
6,000ft pressure altitude for M > 8,350 kg (18,410 lb.)

航途中/En route:

重量≤ 8350 公斤 (18410 磅), 20000 英尺压力高度
20,000ft pressure altitude for M ≤ 8,350 kg (18,410 lb.)

重量>8350 公斤 (18410 磅), 20000 英尺压力高度
20,000ft pressure altitude for M > 8,350 kg (18,410 lb.)

10.2 高度-AS332C1, L1

起飞和着陆/Take-off and landing:

Altitude - AS 332C1, L1

- 1640 英尺压力高度/15000 英尺密度高度
- 1,640 ft pressure altitude / 15,000ft density altitude

航途中/En route:

- 当 $M \leq 8350$ 公斤 (18410 磅) 时, 1640 英尺/25000 英尺压力高度
- 1,640ft./25,000ft pressure altitude for $M \leq 8,350\text{kg}$ (18,410 lb.)
- 当 $M > 8350$ 公斤 (18410 磅) 时, 1640 英尺/9500 英尺压力高度
- 1,640ft./9,500ft pressure altitude for $M > 8,350\text{kg}$ (18,410 lb.)

10.3 温度/ Temperature

- 30°C 到 ISA + 35°C 限制到 50°C。
- 30°C to ISA + 35°C limited to 50°C.

低至-45°C 的低温操作见相关飞行手册增补
see relevant Flight Manual Supplement for colder operation down to -45°C.

11. 操作限制/Operating Limitations

昼夜间的目视飞行规则
VFR day and night

昼夜间的仪表飞行规则
IFR day and night

无结冰条件
Non-icing conditions

只有安装了相关飞行手册增补中列出的设备, AS 332C 和 L1 才可以在全结冰条件下运行。

Flight in full icing conditions is permitted on AS 332C and L1 models only when equipment items listed in relevant flight manual supplement are installed.

只有安装了相关批准的飞行手册增补中列出的设备, AS 332 L1 才可以在有限结冰条件下运行 (见注释 6)。

Flight in limited icing conditions is permitted on AS 332 L1 models only when equipment items listed in relevant approved flight manual supplements are installed (see Note 6).

12. 最大重量

Maximum Masses

AS332C

起飞和着陆/Take-off and landing

在 SB 01.03 实施前, 8350 公斤 (18410 磅)
8,350kg (18,410 lb), prior SB 01.03 embodiment

		在 SB 01.03 实施后, 8600 公斤 (18960 磅) 8,600kg (18,960 lb), after SB 01.03 embodiment
	AS 332 C1, L1	8600 公斤 (18960 磅) 8,600kg (18,960 lb)
13. 重心范围 Centre of Gravity Range		参见批准的旋翼航空器飞行手册 Refer to approved Rotorcraft Flight Manual
14. 基准 Datum	纵向 Longitudinal	主旋翼中线前 4.70m (183 英尺 4 英寸) 4.70 m (183ft 4in) forward of main rotor centreline
	侧向 Lateral	飞行器对称平面 aircraft symmetry plane
15. 水平测量设施 Levelling Means		机身右侧为水平盘, 左侧为垂线刻度盘 Levelling plate on right side of the fuselage and graduated plate for plumb line on left side
16. 最小飞行机组 Minimum Flight Crew	AS332 C	VFR: 1 名飞行员+1 名有资质的机组人员 (*) VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 名飞行员 IFR: 2 pilots
	AS 332 C1, L1	VFR: 20000 英尺以下, 1 名飞行员+1 名有资质的机组人员 (*) 20,000ft 以上, 2 名飞行员 VFR: below 20,000ft, 1 pilot+1 qualified crew member (*) above 20,000ft, 2 pilots IFR: 2 名飞行员 IFR: 2 pilots

(*)如果自动驾驶仪各通道中至少有一路工作正常, 则无需该机组成员。
(*) the qualified crew member is not required if one lane of each AP channel, at least, is in operation.

安装了 AHCAS 的 AS 332C1 和 L1
(商 用 名 称 AS332C1e 和 AS332L1e)
AS332C1 and L1 equipped with AHCAS (commercial reference AS332C1e and AS332L1e)

目视飞行规则: 1 名飞行员
VFR: 1 pilot

仪表飞行规则: 2 名飞行员
IFR: 2 pilots

17. 最大乘客座位数	AS 332 C, C1	19
Maximum Passenger Seating Capacity	AS 332 L1	24

18. 乘客应急出口 / Passenger Emergency Exit	参见批准的飞行手册 Refer to approved Flight Manual
---	--

19. 最大行李/货物载荷 Maximum Baggage/ Cargo Loads	对于货运构型，在货物被平衡分配的配置下，客舱地板（从+2.48 米到+7.63 米）的结构强度满足均布载荷 800kg/m ² 的要求 the cabin floor (from + 2,48m to + 7,63m) is provided with the structural strength required for a load of 800kg/m ² evenly distributed in cargo configuration
--	--

20. 旋翼叶片控制运动 Rotor Blade control movement	操纵装置信息，参看飞行器维护手册 For rigging information, refer to AMM
--	---

21. 辅助动力装置 Auxiliary Power Unit (APU)	无 None
--	-----------

IV. 使用和维修技术资料/Operating and Service Instructions

1. 飞行手册

Flight Manuals

AS332 C	EASA DOA N°21J700 于 2018 年 7 月 25 日批准的 Code J 飞行手册或随后批准的版本。
AS332 C	Flight Manual Code J approved under EASA DOA N°21J700 on July 25, 2018 or subsequent approved revisions.
AS332 C1	EASA DOA N°21J700 于 2018 年 7 月 25 日批准的 Code J 飞行手册或随后批准的版本。
AS332 C1	Flight Manual Code J approved under EASA DOA N°21J700 on July 25, 2018 or subsequent approved revisions.

安装了 AHCAS 的 AS332C1 和 L1
(商 用 名 称 AS332C1e 和
AS332L1e)

EASA DOA N°21J700 于 2018 年 6 月 14 日批准的 Code A 飞行手册或随后批准版本。

AS332 C1/L1 equipped with
AHCAS (commercial reference

AS332C1e and AS332L1e)

Flight Manual Code A approved under EASA DOA N°21J700
on June14, 2018 or subsequent approved revisions.

AS332L1 待定/TBD

2. 维护手册

Maintenance Manual

适航限制: AS 332C, C1, L1, 由 DGAC-F 或 EASA 批准的维护服务建议第 05.99 章, 或者由 EASA 批准的主服务手册第 4 章。

Airworthiness Limitations:

AS 332C, C1, L1 Maintenance Servicing Recommendations, Chapter 05.99, approved by DGAC-F or EASA or Master Servicing Manual Chapter 04 approved by EASA.

维护程序: - AS 332C, C1, L1 维护服务建议 (PRE)

Maintenance Programme: -AS332C, C1, L1 Maintenance Servicing Recommendations (PRE)

- AS 332C, C1, L1 飞行器维护手册 (AMM)

- AS 332C, C1, L1 Aircraft Maintenance Manual (AMM)

- 其他: AS332C, C1, L1 大修手册, 修理手册, IPC

- others: AS332C, C1, L1 Overhaul Manual, Repair Manual, IPC

3. 服务信件和服务通告

Service Letters and Service Bulletins

由宇航或空直或空客直升机发布并被 DGAC-F 或空直 DOA 或空客直升机 DOA 批准的

As published by Aérospatiale or Eurocopter or Airbus Helicopters and approved by DGAC-F or Eurocopter DOA or Airbus Helicopters DOA

V. 注释/Notes

注释/NOTE 1: 有效序列号/Eligible serial numbers:

型别 AS 332 C, 2001 及后续/2001 and subsequent of AS 332 C model

型别 AS 332 L1, 2132 及后续/2132 and subsequent of AS 332 L1 model

型别 AS 332 C1, 有效序列号见注释 2/see Note 2 for eligible serial numbers of AS 332 C1 model

注释/NOTE 2: 可以通过 SB 01.00.26 将 AS 332 C 型号转换为 AS332 C1, L1 型号。

Conversion from AS332C models to AS332C1, L1 variants is possible through SB 01.00.26.

- 注释/NOTE 3: 对于选装设备的认可可独立于基本型直升机的单独批准, 如有必要, 每一个选装设备都有经批准的飞行手册增补与之相对应。
The certified “optional” installations are each approved independently of the basic helicopter and an approved Flight Manual Supplement is associated to each optional installation if necessary.
- 注释/NOTE 4: 客舱内饰和座椅构型必须经批准。
Cabin Interior and Seating Configurations must be approved.
- 注释/NOTE 5: 商用名称: 超美洲豹 Mk I 相当于型别 AS 332 C, C1 和 L1; 商业名称 AS332 C1e 和 AS332L1e 用于列在下方注释 8 中的安装了 AHCAS 的 AS 332 C1 和 L1。
Commercial designation: SUPER PUMA Mk I corresponds to AS 332 C, C1 and L1 models; Commercial references AS332 C1e and AS332L1e are used for AS332C1 and AS332L1 equipped with AHCAS system and modifications listed below in Note 8.
- 注释/NOTE 6: “有限结冰条件”飞行:
Flight in “icing conditions of limited severity”:
只允许用于配有相关飞行手册增补的型别 AS332 L1, 最初批准的 code E (CAA-UK) 版次 RN0, 或者 DGAC-F 或 EASA 随后批准的版本; 这个 code E (CAA-UK) 飞行手册增补不包括运行批准, 运行必须按照适用的运行规章实施。
Permitted on AS 332 L1 model only, with relevant Flight Manual Supplement, formerly approved under code E (CAA-UK) at normal revision RN0, or subsequent DGAC-F or EASA approved issues; such code E (CAA-UK) Flight Manual Supplement does not constitute operational approval and operations must be conducted in accordance with applicable operational regulation.
- 注释/NOTE 7: 没有主减速器火警探测系统的 AS 332C, L1 直升机是经过 AMS 07-21653 改装的, 设计更改来源于 CAA-UK 的最初型号合格审定。
AS 332C, L1 helicopters without MGB fire detection system are those modified by AMS 07-21653, design change resulting from CAA-UK's original type certification.
- 注释/NOTE 8: 安装以下欧直更改的 AS332C1, L1 (商业名称 AS332C1e, AS332L1e) 飞行器, 按照 21A.101 分类为重要更改的设计更改和审定基础如下:
For AS332C1, L1 Aircrafts with the following Eurocopter modifications installed (commercial reference AS332C1e, AS332L1e), the design change was classified as Significant per 21A.101 and the certification basis is listed below:
MOD 07.26640 -对应 AFCS 集成进行的液压和飞行控制适应更改;
MOD 07.26640 - Hydraulic and flight control adaptation for AFCS integration;
MOD 07.26641 -VMS 安装;
MOD 07.26641 -VMS installation;
MOD 07.26642 -AFCS 安装;
MOD 07.26642 - AFCS installation;
MOD 07.26643 -FDS 安装;
MOD 07.26643 - FDS installation;
MOD 07.26644 – 航姿主参考的安装;

MOD 07.26644 - Primary references installation;
MOD 07.26645 - 安装 AHCAS 带来的驾驶舱适应更改;
MOD 07.26645 - Cockpit adaptation for AHCAS installation;
MOD 07.26646 - 驾驶舱照明;
MOD 07.26646 - Cockpit lighting;
MOD 07.26647 - 电气布线和连接适应更改;
MOD 07.26647 - Electrical wiring and connections adaptation;
MOD 07.26648 - 电源分布更改;
MOD 07.26648 - Electrical power distribution modification;
MOD 07.26649 - 警告/戒备和辅助设备适应更改;
MOD 07.26649 - Warnings/Cautions and ancillaries adaptation;
MOD 07.26650 - 设备安装结构适应更改。
MOD 07.26650 - Equipment installation structure adaptation.

影响区域

AFFECTED AREA

影响区域（主要设计更改）是驾驶舱仪表板上涉及电子系统集成的飞行器电子设备：AFCS, VMS, MFD, ISIS, ADU 和 AHRS。

The affected area (primary design change) is aircraft avionics referring to the integration of the avionic systems on cockpit instrument panel: AFCS, VMS, MFD, ISIS, ADU and AHRS.

航电设备安装包括信息显示（直升机参数，发动机参数和导航参数，AFCS 模式和选装的高级模式），通过：

Installation of the avionic equipment includes the display of the information (vehicle parameters, engine parameters and piloting parameters, AFCS modes and upper modes as an option) through:

- 仪表板上的 MFD（集成 FDS 的一部分），
MFD on instrument panel (part of the FDS integration),
- 仪表板上的 EID（集成 VMS 的一部分），
EID on instrument panel (part of the VMS integration),
- 仪表板上的 ISIS（集成传感器的一部分）。
ISIS on instrument panel (part of the sensors integration).

对于受影响区域，2008 年 11 月 17 颁布的 CS29 修正案 2 是适用的，规章要求所影响的内容如下（参见 CRI A-01）：

For this affected area, CS29 Amendment 2, dated 17 November 2008, is applicable and the requirements impacted by are listed below (see reference CRI A-01):

CS29.0771 驾驶舱
CS29.0771 Pilot compartment
CS29.0773 驾驶舱视界
CS29.0773 Pilot compartment view
CS29.0777 驾驶舱操纵器件
CS29.0777 Cockpit controls
CS29.1301 功能和安装
CS29.1301 Function and installation
CS29.1303 飞行和导航仪表
CS29.1303 Flight and navigation instruments
CS29.1305 动力装置仪表

CS29.1305 Power plant instruments
CS29.1309 设备系统和安装
CS29.1309 Equipment, systems, and installations
CS29.1321 布局和可见度
CS29.1321 Arrangement and visibility
CS29.1327 磁航向指示
CS29.1327 Magnetic direction indicator
CS29.1329 自动驾驶仪系统
CS29.1329 Automatic pilot system
CS29.1333 仪表系统
CS29.1333 Instrument systems
CS29.1335 飞行指引系统
CS29.1335 Flight director systems
CS29.1543 仪表标记：总则
CS29.1543 Instrument markings: general
CS29.1545 空速表
CS29.1545 Airspeed indicator
CS29.1547 磁航向指示器
CS29.1547 Magnetic direction indicator
CS29.1549 动力装置仪表
CS29.1549 Power plant instruments
附录 B 直升机仪表飞行适航限制
Appendix B Airworthiness Criteria For Helicopter Instrument Flight

专用条件：

Special Condition:

最小飞行经验(CRI B-01)
Minimum in flight experience (CRI B-01)
搜索救援系统 (CRI B-02)
Search and Rescue system (CRI B-02)
高强度辐射场（HIRF）影响的防护(CRI F-02)
Protection from the effects of High Intensity Radiated Fields (HIRF) (CRI F-02)

等效安全：

Equivalent Safety Finding:

IFR 静态纵向稳定性-空速稳定性(CRI B-04)
IFR Static Longitudinal Stability – Airspeed Stability (CRI B-04)
VNE 声音告警 (CRI F-01)
VNE aural warning (CRI F-01)
空速表标记(CRI G-01)
Airspeed indicator markings (CRI G-01)
动力装置仪表标记 (CRI G-02)
Power plant instrument markings (CRI G-02)

次要更改

SECONDARY CHANGE

为了在超美洲豹 MK1 AS332 C1,L1 上集成这些系统, 进行了一些次要更改:

To integrate these systems on Super Puma MK1 AS332 C1, L1, some secondary changes have to be applied:

- 航电系统的电气集成,
Electrical integration of the avionic systems,
- 电子系统的机械集成,
Mechanical integration of the avionic systems,
- 液压和飞行控制系统的适应更改,
Adaptation of hydraulic and flight controls systems,
- AFCS 更改,
AFCS modifications,
- 驾驶舱照明更改,
Cockpit lighting modifications,
- 机身的其它结构更改,
Other structural modifications of the airframe,
- 警告和戒备的更改。
Warnings and cautions modifications.

对于这些次要更改, 适用的审定基础是 AS332C1,L1 现行的审定基础。

For these secondary changes, the certification basis to be applied is the existing certification basis for the AS332C1, L1.

虽然如此, 空直选择符合影响区域的要求, 符合 CS29 修正案 2 的部分如下。

Nevertheless, Eurocopter has elected to comply with the requirements of affected area, completed by the ones of CS29 Amdt 2 listed below.

选择符合的要求:

Requirements elected to comply:

- CS29.0161 配平操纵
- CS29.0161 Trim control
- CS29.0671 总则
- CS29.0671 General
- CS29.0672 增稳系统、自动和带动力的操纵系统
- CS29.0672 Stability augmentation, automatic, and power-operated systems
- CS29.1322 警告灯、戒备灯和提示灯
- CS29.1322 Warning, caution, and advisory lights
- CS29.1381 仪表灯
- CS29.1381 Instrument lights
- CS29.1523 最小飞行机组
- CS29.1523 Minimum flight crew
- CS29.1525 运行类型
- CS29.1525 Kinds of operation

未受影响区域

UNAFFECTED AREA

列在 EASA TCDS.R.002 中的现有的审定基础（FAR29 修正案 16 和 DGAC 的专用条件）是适用的。

The existing certification basis (FAR29 amendment 16 and DGAC special conditions) as listed on EASA.TCDS.R.002 is applicable.

第 3 节/SECTION 3: AS 332 L

I. 总则/General

1. 型号/衍生型或型别

Type/Variant or Model

(a) 型号/Type AS332

(b) 衍生型或型别/Variant or Model AS332L

2. 适航类别

Airworthiness Category

大型旋翼航空器, A 类和 B 类

Large Rotorcraft, Category A and B

3. 型号认可证持有人

VALIDATION of Type Certificate Holder

Airbus Helicopters

Aéroport International Marseille-Provence

13725 MARIGNANE Cedex

France

4. DGAC 型号合格证/Type Certificate

Number: 56

DGAC 型号合格证数据单

Number: 127

Type Certificate Data Sheet

Version: 9

5. 申请 CAAC 认可审定的日期

24 Oct 2000

CAAC Validation Application Date

6. 产品有效性/Series Nos. Eligible

对于申请 CAAC 审定的每一架直升机, 其出口适航证上都必须由 DGAC 按下列“进口要求”予以签注。

A DGAC “Certificate de Navigabilite pour Exportation” endorsed as noted below under “Import Requirements” must be submitted for each individual helicopter for which application for CAAC certification is made.

7. 进口要求 Import Requirements

为具备在中国运行的资格, 按本型号认可证制造的每架直升机必须具有一份出口适航证, 其上签注有出口国适航当局的审定声明, 即: 本架航空器符合 CAAC 所批准的型号设计并处于可安全运行的状态。

To be considered eligible for operation in China, each helicopter manufactured under this *Validation of Type Certificate* must be accompanied by a certificate of airworthiness for export endorsed by the DGAC which states (in English language): This aircraft conforms to its CAAC type design and is in a condition for safe operation.

8. 资料批准 Service Information

CAAC 接受, 注明有 DGAC 批准或 DGAC-DOA No. F.JA.01 批准字样的服务通告、结构修理手册、航空器飞行手册、主维护手册和航空器维护手册等使用维护资料。DGAC 的这些批准代表了 CAAC 的批准且仅限于本型号设计。

Service bulletins, structural repair manuals, aircraft Flight Manuals, master servicing manual, and aircraft maintenance manuals which contain a statement that the document is DGAC approved or approved under

DGAC Design Organization Approval No. F.JA.01, are accepted by the CAAC and are considered CAAC-approved. These approvals pertain to the type design only.

II. 认可审定基础 Validation Certificate Basis

CAAC 的认可审定基础由 DGAC 审定基础中的适用要求和 CAAC 的附加技术条件组成如下:

The CAAC validation basis is consists of the DGAC certification basis as applicable and the CAAC additional technical conditions, as follows:

1. DGAC 审定基础的适用要求/DGAC certification basis as applicable

- 适航标准及其修正案水平/Airworthiness Standards and Amendment Levels
 - FAR29 Amdt. 29-1 to 29-16
- 专用条件/Special Condition: (Note 1)
 - Icing Protections (March 28, 1978)
 - Direct Lightning Protection (March 28, 1978)
 - Airworthiness Criteria for Helicopter Instrument Flight (December 15, 1978)

2. CAAC 附加技术条件/CAAC additional technical conditions

-CCAR21.19, Amendment Level: R2

- 根据认可审定基础中的适用要求为旅客所设置的所有文字标记和标牌以及各应急出口的内外标记均应是中英文格式, 如在客舱、行李舱和贮存舱的内部和外部有关安全说明和应急撤离说明的标记和标牌。
The placards and markings for passengers and for emergence exit as required by the applicable requirements of this validation basis, such as safe and emergence instructions located inside or outside of passenger cabin, baggage and stowage compartments, must be presented in Chinese and English languages.

- AS332L 应能够使用中国 3 号喷气燃油。

Chinese No.3 Jet Fuel is required for the usability on AS332L.

III. 技术特征和运行限制/Technical Characteristics and Operational Limitations

第 3.1 条至 3.16 条列出了 AS332L 的技术特性。

Common characteristics of AS332L are listed in Section 3.1 to 3.16.

3.1 CAAC 批准的型号设计定义文件/CAAC Approved Type Design Definition

Eurocopter or Airbus Helicopter document 332ABN0164

3.2 设备 (注释 4) /Equipment (Note 4)

认可审定基础中适用条款所要求的基本设备必须安装在航空器上。

The basic required equipment as prescribed in the applicable airworthiness regulations of the validation basis must be installed in the helicopter.

3.3 燃油/Fuel

- 规格/Specification: 中国 3 号喷气燃油 Chinese No.3 Jet Fuel;
其它见飞行手册 Refer to Flight Manual for others.

- 容量 (升) /Capacity (Litres): 2082 (Total), 2058.7(usable)

右组/Right Group

-Longitudinal Tank	236 at 4.575 m
-Transverse Tank	405 at 3.550 m
-7# Tank	526 at 2.850 m

左组/Left Group

-Longitudinal Tank	246 at 4.575 m
-Transverse Tank	423 at 5.600 m
-5# Tank	246 at 6.340 m

- 不可用燃油（升）/ unusable fuel (Litres):

-右组/Right Group	7.3
-左组/Left Group	16

3.4 发动机滑油/Engine oil

- 规格/Specification: 参见飞行手册 Refer to Flight Manual.
- 容量（升）/Capacity(Litres): 2×7.6 at 2.75 m

3.5 MGB、IGB 和 TGB 减速器滑油/MGB, IGB&TGB oil

- 规格/Specification: 参见飞行手册 Refer to Flight Manual.
- 容量（升）/Capacity(Litres):
 - MGB: 19.6 at 5.58 m
 - IGB: 0.62 at 12.51 m
 - TGB: 1.44 at 13.81 m

3.6 空速限制/Airspeed Limits

- 有动力时/Power-on:
 - VNE = 167 kt (Hp = 0 and W ≤ 8350 kg)
 - VNE= 150 kt (Hp = 0 and W> 8350 kg)
- 无动力时/Power-off:
 - VNE = 150 kt (Hp = 0 and W ≤ 8350 kg)
 - VNE= 145 kt (Hp = 0 and W> 8350 kg)
- VNE 与高度及重量的关系/
VNE Reduction as a function of
altitude and weight: 参见飞行手册/Refer to Flight Manual.

3.7 旋翼转速/Rotor Limitations

- 有动力时/Power-on:
 - 265 RPM (额定/rated)
 - 245~275 RPM (范围/range)
- 无动力时/Power-off:
 - 310 RPM (最大瞬时转速/Max. transient)
 - 290 RPM (最大稳定状态/Max. steady state)
 - 220 RPM (最小/Minimum, if IAS ≤ 100 kt)
 - 245 RPM (最小/Minimum, if IAS > 100 kt)

3.8 目视和音响警告/

Visual and audio warnings:

- 高速/High speed: 290 RPM
- 低速/Low speed: 245 RPM

3.9 最大重量/Maximum Weights: 8600 kg**3.10 重心范围/C.G Range:**

- 纵向前极限/Longitudinal forward limit: 4.40 m ($W \leq 7000$ kg)
4.52 m ($W = 8600$ kg)
- 纵向后极限/Longitudinal rear limit: 4.90 m ($W \leq 7000$ kg)
4.85 m ($W = 8600$ kg)
- 横向右极限/Lateral R.H: 0.09 m
- 横向左极限/Lateral L.H: 0.08 m

3.11 基准/Datum

- 纵向 CG/Longitudinal CG: 主旋翼中心线正前方 4.67 m/4.67 m forward of the main rotor centerline.
- 横向 CG/Lateral CG: 直升机横向对称面/aircraft symmetry plane.

3.12 水平测量设施/Leveling means:

机身右侧为水平基座盘，左侧为垂线刻度盘
Level support plate on right side of fuselage. Graduated plate for plumb line on the left side.

3.13 限制载荷系数/Limit load factor: + 2.67 and - 0.5**3.14 旋翼和控制器设定**

Rotor and control setting: refer to the Maintenance Manual.

3.15 载货/Baggage Loading

- 最大分布载荷/Max. load: 800 kg/m²

3.16 最大客座数 24

Max. number of passenger seats:

第 3.17 条至 3.19 条列出了 AS332L 特有的技术特性。

Special characteristics of AS332L are listed in Section 3.17 to 3.19.

3.17 最大使用高度/Maximum Operating Altitude: Hp = 6096 m ($W \leq 8350$ kg)
Hp= 2895 m ($W > 8350$ kg)

3.18 最小机组人数/Minimum Crew:

- VFR Conditions: (Note 6) 1 pilot + 1 crewmember
- IFR Conditions: 2 pilots

3.19 发动机/Engines

- 数量/Numbers: 2
- 型别/Model: MAKILA 1A
- 限制/Limits: (标准海平面条件下-无 P2 放气/Standard sea level condition-without P2 air bleed)

额定状态 Rating	2.5 分钟 2.5min	30 分钟 30 min	起飞 (5 分钟) Take-off(5 min.)	最大连续 Max. continuous	启动 Starting
最大功率 Power Maximum (kw)	1310	1240	1240	1130	
燃气涡轮转速 Gas generator speed Ng (rpm)	34000	33200	33200	32500	
排气温度 Exhaust gas Temp.T4 (°C)	810	775	785	735	750 (最大) 750(max)

瞬时限制/Transient Limitations: 见飞行手册/Refer to Flight Manual.

IV. 使用和维护技术资料 Operating and Service Instructions**4.1 CAAC 飞行手册/CAAC Flight Manual:**

-AS332L:

DGAC 批准的带有 J 代码的飞行手册 (版次 RN02, 00-38), 或 DGAC 批准的后续版本。

DGAC approved J-coded Flight Manual (RN02, 00-38), or later DGAC approved revisions.

4.2 持续适航文件/Continued Airworthiness Documents

- AS332 Maintenance Manual,
- AS332 Overhaul Manual,
- AS332 Repair Manual,
- AS332 Illustrated Part Catalogue,
- AS332 DGAC-approved Service Bulletins.

V. 注释/Notes

注释/NOTE 1: DGAC 信函 53904 (1980/08/18), 定义了 AS332L 的专用条件。
The Special Conditions of AS332L are defined in DGAC letter 53904, August. 18, 1980.

注释/NOTE 2: 法国民航局生产许可 Production agreement: No. P02 (1992/01/02)
Production agreement (JAR-21): No. F.G.003 (1997/12/22)

注释/NOTE 3: 法国民航局 DOA 批准 Design agreement: No. F.JA.01 (1998/07/20)

注释/NOTE 4: 飞行手册增补是对安装选装设备的批准, 一项安装对应于一个特定的增补。
The optional installations are each approved individually of the Flight Manual and form a subject of a Flight Manual Supplement specific to each installation.

注释/NOTE 5: 重量及装载说明中的重量-平衡细分项目 (包括一系列设备), 在初次单机适航审

查时就必须安装或装载到直升机上。为获得最相符的重量-平衡结果，每一直升机应采用支撑点而非起落架进行称重。当直升机的更改影响到重量平衡时，应符合飞行手册中有关重量-平衡的要求。

The weight and balance breakdown including the list of equipment items incorporated in the weight and loading instructions, must be provided for each helicopter at the time of original airworthiness certification. To obtain the most consistent weight and balance results, all helicopter should be weighed on jackpoints rather than on wheels. When changes are made to the helicopter which affect the weight and balance, refer to the Flight Manual for weight and balance instructions.

注释/NOTE 6:

如果自动驾驶仪各通道中至少有一路工作正常，则无需该机组成员。

The qualified crewmember is not required if one lane of each AP channel, at least, is in operation.

第 4 节/SECTION 4: EC 225 LP

I. 总则/General

- | | |
|--------------------------|--|
| 1. 型号/衍生型或型别: | EC 225 LP |
| Type / Variant or Model: | EC 225 LP |
| 2. 适航类别: | 大型旋翼航空器, A 类 (*) 和 B 类 |
| Airworthiness Category: | (*) 见注释 6。
Large Rotorcraft, Category A (*) and B
(*) see note 6. |
| 3. 型号合格证持有人: | Airbus Helicopters |
| Type Certificate Holder: | Aéroport International Marseille-Provence
13725 MARIGNANE cedex
France |
| 4. 制造商: | 同上 |
| Manufacturer: | As above |
| 5. DGAC-F 申请日期: : | 2000 年 11 月 7 日 |
| DGAC-F Application Date: | 07 November 2000 |
| 6. EASA 适航证颁发日期: | 2004 年 7 月 27 日 |
| EASA Certification Date: | 27 July 2004 |
| 7. JAA 推荐日期: | 不适用 |
| JAA Recommendation Date: | N/A |

II. 认可审定基础/Validation Certification Basis

- | | |
|-----------------------------|--|
| 1. 适航要求: | 1999 年 12 月 1 日生效的 JAR 29, 改版 1, 以下条款除外: |
| Airworthiness Requirements: | JAR 29, Change 1 effective December 1 st , 1999, except for
the following: |
| 2. 批准的回溯和豁免: | |
| | •以下条款回溯至 FAR 29, 第 24 修正案: |
| | - FAR 29.561(b)(3) 应急着陆情况-总则 (参见 CRI C-01) |
| | •以下条款部分回溯至 FAR 29, 第 24 修正案: |
| | - FAR 29.571 结构的疲劳评定 (参见 CRI C-03) |
| | - FAR 29.785 座椅、卧铺、安全带和肩带 (参见 CRI D-01) |
| | •豁免以下 JAR 29, 改版 1 的条款: |

- JAR 29.562 应急着陆动态情况 (参见 CRI C-02)
- JAR 29.952(a)(c)(d)(e)(f)(g) 燃油系统的抗坠撞 (参见 CRI E-01)
- JAR 29.955(b) 燃油输油系统 (参见 CRI E-05)
- 部分豁免以下 JAR 29, 改版 1 的条款:
 - JAR 29.963(b) 燃油箱: 总则; 抗刺穿 (参见 CRI E-02)

2. Reversions and Exemptions Granted:

- reversion to FAR 29, Amendment 24 as follows:
 - FAR 29.561(b)(3) Emergency landing conditions-general (Reference CRI C-01)
- partial reversions to FAR 29, Amendment 24 as follows:
 - FAR 29.571 Fatigue evaluation of structure (Reference CRI C-03)
 - FAR 29.785 Seat, berth, safety belts, and harnesses (Reference CRI D-01)
- exemptions from JAR 29, Change 1 as follows:
 - JAR 29.562 Emergency dynamic landing conditions (Reference CRI C-02)
 - JAR 29.952(a)(c)(d)(e)(f)(g) Fuel system crash resistance (Reference CRI E-01)
 - JAR 29.955(b) Fuel transfer (Reference CRI E-05)
- partial exemption from JAR 29, Change 1 as follows:
 - JAR 29.963(b) Fuel tanks: general; Puncture resistance (Reference CRI E-02)

3. 等效安全条款:

- JAR 29.173, 175 纵向静稳定性(参见 CRI B-03)
- JAR 29 附件 B §IV IFR 纵向静稳定性 – 空速稳定性 (参见 CRI B-04)
- JAR 29.571 对更改过的金属重要结构件的疲劳评定 (参见 CRI C-04)
- JAR 29.807(c)(1) 不在机身侧面的旅客应急出口 (参见 CRI D-02)
- JAR 29.813(a), 29.815 应急出口通路 – 主通道宽度 (参见 CRI D-03)
- JAR 29.807(d)(2) 水上迫降旅客应急通道 (参见 CRI D-07)
- JAR 29.923(a)(2) 旋翼传动系统和操纵机构的试验 (参见 CRI E-03)
- JAR 29.1303(j) VNE 音响警告 (参见 CRI F-01)
- JAR 29.1545(b)(4) 空速表标记 (参见 CRI G-01)
- JAR 29.1549(b) 动力装置仪表标记 (参见 CRI G-02)

3. Equivalent Safety Findings:

- JAR 29.173, 175 Static longitudinal Stability (Reference CRI B-03)
- JAR 29 Apdx B §IV IFR Static longitudinal Stability – Airspeed stability (Reference CRI B-04)
- JAR 29.571 Fatigue evaluation of structure for changed metallic PSE (Reference CRI C-04)
- JAR 29.807(c)(1) Passenger emergency exits other than side-of-fuselage (Reference CRI D-02)
- JAR 29.813(a), 29.815 Emergency exit access - Main aisle width (Reference CRI D-03)
- JAR 29.807(d)(2) Ditching emergency exits for passengers (Reference CRI D-07)
- JAR 29.923(a)(2) Rotor drive system and control mechanism tests (Reference CRI E-03)
- JAR 29.1303(j) VNE aural warning (Reference CRI F-01)
- JAR 29.1545(b)(4) Airspeed indicators markings (Reference CRI G-01)
- JAR 29.1549(b) Powerplant instruments markings (Reference CRI G-02)

4. 专用条件:

- 飞行时间的最低要求(参见 CRI B-01)
- SAR (搜索和救援) 系统(参见 CRI B-02)
- 水喷洒系统 (参见 CRI B-05)

- 外部装载, JAR 29.865 第 2 修正案 (参见 CRI D-06)
- 高强度辐射环境下的防护 (参见 CRI F-02)
- 由EASA作为规定的直升机结冰限制批准(参见CRI O-01)
- Minimum in flight experience (Reference CRI B-01)
- SAR (Search and Rescue) system (Reference CRI B-02)
- Water bombing system (reference CRI B-05)
- External loads, JAR 29.865 amdt. 2 (Reference CRI D-06)
- Protection from the effects of High Intensity Radiated Field (Reference CRI F-02)
- Helicopter limited icing approval as prescribed by the EASA (reference CRI O-01)

4. Special Conditions:

5. 包括噪声的环保要求:

噪声

满足 ICAO Annex 16, Volume 1, Part II, Chapter 8 和 Appendix 4 的要求

测量的噪声级见飞行手册

发动机排放

满足 ICAO Annex 16 Volume 2(燃油排泄)的要求

5. Environmental Standards including noise:

Noise.

Compliant with ICAO Annex 16, Volume 1, Part II, Chapter 8 and Appendix 4

see Flight Manual for measured noise level

Engine Emission.

Compliant with ICAO Annex 16 Volume 2, (Fuel Discharge).

III.技术特征和运行限制/Technical Characteristics and Operational Limitations

1. 型号设计定义

- | | |
|----------------------|---------------------------|
| 1.1 标准构型: | 见参考文件 332A 89 2120 |
| 1.2 装备 MPAI (*) 的构型: | 引入了设计更改 AMS OP23554 的标准构型 |
| (*) MPAI 代表多功能进气道 | |

CAAC 批准的型号设计定义文件:

Eurocopter 或 Airbus Helicopters Document No. 332 ABN 0228

1. Type Design Definition:

- | | |
|------------------------|--|
| 1.1 Standard: | document ref. 332 A 89 2120 |
| 1.2 MPAI (*) equipped: | when standard definition is completed with design change ref. AMS OP 23554 |

(*) MPAI means Multi-Purpose Air Intakes

CAAC approved Type Design Definition:

Eurocopter or Airbus Helicopters Document No. 332 ABN 0228

2. 描述:

- 作为已获得 EASA 型号合格证的 AS332L2 型直升机的衍生发展型

的双发直升机

- 标准构型安装隔栅型的发动机进气道，MPAI 构型是选装型，安装多功能进气道

2. Description:

- large twin-engine helicopter designed as a derivative product of the former type certified model AS 332 L2
- standard configuration consists of grip-type engine air intakes installation, while MPAI configuration is optional and consists of Multi-Purpose Air Intakes installation

3. 设备:

按照 JAR29 的要求，参见经批准的飞行手册

3. Equipment:

As required by JAR 29 and referenced within approved Flight Manual

4. 尺寸:

机身	宽	3.96m (13ft 00in)
	高	4.97m (16ft 30in)

主旋翼	5 片	直径	16.20m (53ft 14in)
-----	-----	----	--------------------

尾桨	4 片	直径	3.15m (10ft 33in)
----	-----	----	-------------------

4. Dimensions:

Fuselage	Width	3.96m (13ft 00in)
	Height	4.97m (16ft 30in)
Main Rotor	5 blades Diameter	16.20m (53ft 14in)

Tail Rotor	4 blades Diameter	3.15m (10ft 33in)
------------	-------------------	-------------------

5. 发动机:

2 台 Turboméca Makila 2A 或

2 台 Turboméca Makila 2A1

EASA 数据单 No: E.006

5.1 发动机安装限制: 参见经批准的飞行手册

5.2 传动系统扭矩限制: 参见经批准的飞行手册

5. Engines:

2 Turboméca Makila 2A or

2 Turboméca Makila2A1

EASA DS No: E.006

5.1 Installed Engine Limits: Refer to approved Flight Manual

5.2 Transmission Torque Limits: Refer to approved Flight Manual

6. 液体 (燃油/滑油/液压/添加剂):

6.1 燃油 按飞行手册的批准

6.2 滑油 按飞行手册对发动机和齿轮箱的批准

6.3 液压 按飞行手册的批准

6.4 添加剂 按飞行手册的批准

6. Fluids (Fuel/Oil/Hydraulic/Additives):

6.1	Fuel	as approved in the Flight Manual
6.2	Oil	as approved in the Flight Manual for engine and gearboxes
6.3	Hydraulic	as approved in the Flight Manual
6.4	Additives	as approved in the Flight Manual

7. 液体容量:

7.1	燃油	标准构型包括内部油箱 (无 6 号油箱) 和外部浮筒安装的油箱
-----	----	---------------------------------

标准构型	2588 l (682 US gals)
包括选装的内部 6 号油箱	<u>+ 320 l (84 US gals)</u>
	2908 l (766 US gals)

对于其它经批准的可选燃油箱构型和不可用燃油量见飞行手册

7.2	滑油	发动机	4.92 l
		主减速箱	27 l
		中间减速箱	0.62 l
		尾减速箱	1.5 l

7.3	液压	右系统	5.0 l
		左系统	9.5 l

7. Fluid Capacities:

7.1	Fuel	standard configuration consists of internal fuel tanks (without 6 TH tank) and external sponson mounted tanks
-----	------	--

standard configuration	2,588 l (682 US gals)
with optional internal 6 TH tank	<u>+ 320 l (84 US gals)</u>
	2,908 l (766 US gals)

see Flight Manual for other approved optional fuel tanks configurations and for unusable fuel quantities

7.2	Oil	engines	4,92 l
		MGB	27 l
		IGB	0,62 l
		TGB	1,5 l

7.3	Hydraulic	RH system	5,0 l
		LH system	9,5 l

8. 空速限制:

有动力 Vne	5000ft 密度高度以下 175 Kt
	5000ft 以上 175kt-3kt / 1000ft
无动力 Vne	限制到 150 Kt, 规律同有动力 Vne
其它批准的空速限制	参见飞行手册

8. Airspeed Limits:

Vne Power on	175 Kt up to 5,000ft density altitude and 175kt-3kt / 1,000ft above 5,000ft
Vne Power off	Vne Power on limited to 150 Kt

see Flight Manual for other approved airspeed limits

9. 旋翼转速限制:

有动力:

最大	275 rpm
最小	246 rpm
瞬时最小	220 rpm

无动力:

瞬时最大	310 rpm (20 sec)
最大	290 rpm
最小	246 rpm (IAS > 100Kt) 220 rpm (IAS < 100Kt)

9. Rotor Speed Limits:

Power on:

Maximum	275 rpm
Minimum	246 rpm
Min transient	220 rpm

Power off:

Max transient	310 rpm (20 sec)
Maximum	290 rpm
Minimum	246 rpm (IAS > 100Kt) 220 rpm (IAS < 100Kt)

10. 最大使用高度和温度:

10.1 高度

	EC 225 LP – 标准构型	EC 225 LP – MPAI 构型
起飞和着陆	OAT 从-30°C 到 -12°C: - 6000ft 密度高度 + 7400ft 密度高度 OAT 从 -12°C 到 ISA+40°C: (不超过 50°C) - 2000ft 压力高度 + 7400ft 密度高度	OAT 从-30°C 到 -12°C: - 6000ft 密度高度 + 11000ft 密度高度 OAT 从 +7°C 到 ISA+40°C: (不超过 50°C) - 2000ft 压力高度 + 11000ft 密度高度
巡航	OAT 从-30°C 到 -12°C: - 6000ft 密度高度 + 20000ft 密度高度 OAT 从 -12°C 到 ISA+40°C (不超过 50°C) :	

– 2000ft 压力高度
+ 20000ft 密度高度

10.2 温度

EC225LP 标准构型和 MPAL 构型:
-30°C 到 ISA +40°C 限制到+50°C

10. Maximum Operating Altitude and Temperature:

10.1 Altitude

	EC 225 LP - Standard	EC 225 LP – MPAL equipped
Take-off and landing	OAT from -30°C to -12°C: - 6,000ft density altitude + 7,400ft density altitude OAT from -12°C to ISA+40°C (without exceeding +50°C): -2,000ft pressure altitude + 7,400ft density altitude	OAT from -30°C to -12°C: - 6,000ft density altitude + 11,000ft density altitude OAT from -12°C to ISA+40°C (without exceeding +50°C): - 2,000ft pressure altitude + 11,000ft density altitude
En route	OAT from -30°C to -12°C: - 6,000ft density altitude + 20,000ft density altitude OAT from -12°C to ISA+40°C(without exceeding +50°C): - 2,000ft pressure altitude + 20,000ft density altitude	

10.2 Temperature

EC225LP-Standard and MPAL equipped:
-30°C to ISA +40°C limited to +50°C

11. 运行限制:

11.1 总则: 白天和夜晚目视飞行规则
白天和夜晚仪表飞行规则
无结冰条件

11.2 只有选装多功能进气道, 并且安装有其它在经批准的飞行手册附件中列出的相关设备的 EC 225 LP 才被允许在完全结冰条件下飞行。

11.3 只有安装有在经批准的飞行手册附件中列出的相关设备的标准 EC 225 LP 才被允许在完全结冰条件下飞行(见注释 5)。

11. Operating Limitations:

11.1 General:	VFR day and night IFR day and night Non-icing conditions
11.2	The flight in full icing conditions is permitted on EC 225 LP equipped with MPAI optional installation only, when other equipment items as listed in relevant approved Flight Manual Supplement are installed
11.3	The flight in limited icing conditions is permitted on standard EC 225 LP only, when equipment items as listed in relevant approved Flight Manual Supplement are installed (see Note 5.)
12. 最大审定重量:	起飞和着陆 11000kg (24251 lb)
12. Maximum Certified Weights:	Take-off and landing 11,000kg (24,251 lb)
13. 重心:	参考批准的飞行手册
13. Centre of Gravity:	Refer to approved Flight Manual
14. 基准点:	
纵向	主旋翼中心线前 4.67m (183.85in)
横向	飞机对称面
14. Datum:	
Longitudinal	4.67m (183.85in) forward of main rotor centreline
Lateral	aircraft symmetry plane
15. 水平测量方法:	机身右侧为水平基座盘 机身左侧为垂线刻度盘
15. Levelling Means:	Levelling plate on right side of the fuselage and graduated plate for plumb line on left side
16. 最小飞行机组:	两名 (2): 仪表飞行规则中的机长和副驾驶 一名 (1): 目视飞行规则中的飞行员
16. Minimum Flight Crew:	Two (2): Pilot and Co-pilot in IFR One (1): Pilot in VFR
17. 最大乘客座位数:	25
17. Maximum Passenger Seating Capacity:	25
18. 乘客应急出口:	每侧一个超尺寸规定的 II 型出口+两个 IV 型出口
18. Passenger Emergency Exits:	one (1) door whose dimensions exceed those of Type II exit + two (2) Type IV exits on each side
19. 最大行李/货物装载:	客舱地板满足结构强度要求 载货构型下均匀装载的强度为 800kg/m ²
19. Maximum Baggage/Cargo Loads:	the cabin floor is provided with the structural strength required for a load of 800kg/m ² evenly distributed in cargo configuration

- 20. 旋翼叶片和操纵机构运动:** 调整信息参考维护手册
- 20. Rotor Blade and Control Movement:** For rigging information, refer to Maintenance manual
- 21. 辅助动力装置:** 选装设备, 只能在地面使用
参考相关的飞行手册补充
- 21. Auxiliary Power Unit:** Optional equipment, to be used on ground only
see relevant approved Flight Manual Supplement
- 22. 机轮和轮胎:**
- | | |
|-----|--|
| 轮胎: | 前轮: 466 x 173-10
主轮: 615 x 225-10 |
| 机轮: | 前轮: Messier Bugatti C 20525 000
主轮: Messier Bugatti C 20147 200 |
- 22. Wheels and Tyres:**
- | | |
|---------|--|
| Tyres: | nose: 466 x 173-10
main: 615 x 225-10 |
| Wheels: | nose: Messier Bugatti C 20525 000
main: Messier Bugatti C 20147 200 |

IV. 使用 and 维修技术资料/Operating and Service Instructions

1. 旋翼航空器飞行手册, 文件号:

- 1.1 标准构型: EC 225LP 飞行手册, EASA 2004 年 7 月 27 日批准的正规修订版 RN0, 04-20, 或后续批准的版本
- 1.2 MPAI 构型: EC 225LP MPAI 飞行手册, EASA 2004 年 12 月 21 日批准的正规修订版 RN2, 04-44, 或后续批准的版本

1. Rotorcraft Flight Manual, Document No:

- 1.1 Standard: EC 225LP Flight Manual, Normal Revision RN0, 04-20 approved by EASA on 27 July 2004 or subsequent approved issues
- 1.2 MPAI equipped: EC 225LP MPAI equipped Flight Manual, normal revision RN2, 04-44 approved by EASA on 21 December 2004 or subsequent approved issues

2. 维护手册, 文件号:

适航限制见 EASA2004 年 7 月 27 日批准的维护和勤务指导, 05.99 章, edition 2004.05.31, Rev. 000 以及后续批准的版本

EC 225LP 维护大纲:

- 维护和勤务指导 (PRE),
- 飞机维护手册(AMM)

2. Maintenance Manual, Document No:

Airworthiness Limitations as EC 225 LP Maintenance Servicing

Recommendations, Chapter 05.99, edition 2004.05.31, Rev. 000 approved by EASA on 27 July 2004 or subsequent approved issues

EC 225LP Maintenance Programme as:

- Maintenance Servicing Recommendations (PRE),
- Aircraft Maintenance Manual (AMM)

3. 服务信函和服务通告:

Eurocopter 或 Airbus Helicopters 发布并且 EASA 批准

3. Service Letters and Service Bulletins:

As published by Eurocopter or Airbus Helicopters and approved by EASA

4. 要求的设备:

- 满足 JAR 29 的要求并且满足最初的型号设计定义(标准或 MPAI 构型)。
- 参见批准的飞行手册和 MMEL。

4. Required Equipment:

- As per compliance with JAR 29 requirements and in accordance with the original Type Design Definition (standard or MPAI equipped).
- Refer to approved Flight Manual and MMEL.

5. 主最低设备清单:

批准的 EC 225 LP MMEL

5. Master Minimum Equipment List:

EC 225 LP approved MMEL

V. 注释/Notes

注释/NOTE 1: 适用的序列号: EC 225LP 2600 及后续序列号。
Eligible serial numbers: 2600 and subsequent of EC 225LP model.

注释/NOTE 2: 对于可选设备的认可是独立于基本型直升机的单独批准, 对应于每一个可选设备都有必要的、经批准的飞行手册补充与之相对应。(一些可选设备仅限于装备多功能进气道的 EC 225 LP, 并且相关的飞行手册补充被批准仅用于特定的 EC 225 L 型号设计规定)。
The certified "optional" installations are each approved independently of the basic helicopter and an approved Flight Manual Supplement is associated to each optional installation if necessary (some optional installations are specific to the EC 225 LP equipped with MPAI and the relevant Flight Manual Supplements are approved for that particular EC 225 LP type design definition only).

注释/NOTE 3: 客舱内部和座椅构型必须经批准; 在可使用和不可使用的高压喷水系统构型下, 都不允许进行客运; 除了演示高压喷水操作外, 仅在客舱中进行货运的 EC 225 LP 不被批准。
Cabin Interior and Seating Configurations must be approved; passenger transport is not permitted in both operational and non-operational configuration of the Water Bombing

system; except while performing Water Bombing operations, the EC 225 LP is not approved for the carriage of cargo only in the cabin.

注释/NOTE 4: 商用名: 超美洲豹 Mk II+ 或 LP 代表 EC 225 LP

Commercial designation: SUPER PUMA Mk II+ or LP corresponds to EC 225 LP model.

注释/NOTE 5: 在有限的结冰条件下飞行和高压喷水操作: 相关批准的飞行手册补充不构成操作的审查批准, 并且操作必须按照符合性操作规章进行演示。

Flight in limited icing conditions and water bombing operations: the relevant approved Flight Manual Supplements do not constitute operational clearance approvals and operations must be conducted in accordance with applicable operational regulation.

注释/NOTE 6: EC 225 LP 是作为有被规定在相关批准的飞行手册补充中的操作限制的 A 类旋翼航空器被审定的。

The EC 225 LP is certified as Category A rotorcraft with operating limitations as defined in the relevant approved Flight Manual Supplements.

-结束-

- THE END -