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第 1 部分概述（所有型别）

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	VTC0288A, Rev 0, 2014.2.26	2013 年 7 月 31 日 EASA 数据单第 2 版 TCDS EASA A.385, Issue 2, July 31, 2013

2. 认可当局/Validation Authority: 中国民用航空局/CAAC

审定当局/Certifying Authority: 欧洲航空安全局/ EASA

3. 型号合格证持有人/Type Certificate Holder: VULCANAIR S.P.A.

via Giovanni Pascoli, 7
80026 - Casoria (Napoli)
Italy.

4. 认可审定基础/Validation Certification Basis

CAAC 的认可审定基础由 EASA 的审定基础和 CAAC 附加技术条件组成。

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

5. 中国民用航空局附加技术条件/CAAC Additional Technical Conditions

(1) 保留 / [Reserved]

(2) 符合 CCAR 21.29(e)的中文标记标牌要求。 / As per CCAR 21.29(e), all markings and placards on the airplane used for advising, warning, or notifying passengers must be at least in Chinese; all 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) 手持灭火器要求。 / As per CCAR Part 91, General Operation and Flight Rules, for P68 series

airplanes, at least one hand fire extinguisher must be provided and located on or near the flight deck in a place that is readily accessible to the flight crew. For this reason, a hand fire extinguisher complying with such requirement must be included as standard equipment in the type design of aircraft to be operated in China.

(4) CCAR 23.2 的追溯要求。 / Section 23.2 of CCAR part 23 has special retroactive requirement for shoulder harness on occupant seats: Notwithstanding the requirements of part 21 and irrespective of the type certification basis, each normal, utility, and acrobatic category airplane having a passenger seating configuration, excluding pilot seats, of nine or less, manufactured after December 12, 1986, or any such foreign airplane for entry into the China must provide a safety belt and shoulder harness for each forward- or aft-facing seat which will protect the occupant from serious head injury when subjected to the inertia loads resulting from the ultimate static load factors prescribed in Sec. 23.561(b)(2) same as FAR23 Amdt.55 of this part, or which will provide the occupant protection specified in Sec. 23.562 of this part when that section is applicable to the airplane. For other seat orientations, the seat/restraint system must be designed to provide a level of occupant protection equivalent to that provided for forward- or aft-facing seats with a safety belt and shoulder harness installed.

6. 中文标记标牌/ Chinese markings and placards

所有中文标记标牌应符合如下的飞机飞行手册补充的要求 / All Chinese markings and placards must conform to the following AFM supplements:

NOR10.707-1B rev. 62 (for P.68C aircraft)

NOR10.707-8B rev. 69 (for P.68 Observer 2 aircraft)

NOR10.707-30C rev. 20 (for P.68R aircraft)

或后续的批准版本 / or later approved revisions.

第 2 部分 P.68R “Victor”

SECTION 2 P.68R “Victor”

I.概述/General

1. 衍生型或型别/Variant or Model	P.68R “Victor”
适航类别/Airworthiness Category	正常类航空器/ Normal Category aircraft
型号合格证持有人/Type Certificate Holder	VULCANAIR S.P.A. via Giovanni Pascoli, 7 80026 - Casoria (Napoli) Italy.
制造商/Manufacture	VULCANAIR S.P.A. via Giovanni Pascoli, 7 80026 - Casoria (Napoli) Italy.
2. 申请审查日期/ Certification Application Date	1973.02.15/ 15 February 1973
3. 当局型号审查日期	1978.07.31 (RAI TC No. A151; 1998 年 11 月 25 日重新发布 ENAC TC No. A 365)
National Authority Type Certificate Date	31 July 1978 (RAI TC No. A 151; reissued as ENAC TC No. A 365 dated 25 November 1998)

II.审定基础/Certification Basis

1. 确定可使用的要求的参考日期 Reference Date for determining the applicable requirements	1973.02.15 15 February 1973
2. 适航要求（见注释 2.1）	FAR 23 部（1965 年 2 月 1 日生效），包括第 23-1 至第 23-6 修正案，23.561 根据第 7 号修正案，23.507 根据第 14 号修正案。
Airworthiness Requirements(see Note 2.1)	FAR 23 effective 1 February 1965 including Amdt 1 through 6, plus: Amdt 7: § 23.561 Amdt 14: § 23.507
3. EASA 专用条件/ Special Conditions	无/ None
4. EASA 豁免/ Exemptions	无/ None

5. EASA 偏离/ Deviations	无/ None
6. EASA 等效安全/ Equivalent Safety Findings	无/ None
7. 所选的符合性要求	FAR 23 部(1965年2月1日生效): 23.725、23.727, 23.729, 23.735, 23.867, 23.1435 根据第 7 号修正案
Requirements elected to comply	FAR 23 effective 1 February 1965:Amdt 7: §§ 23.725, 23.727, 23.729, 23.735, 23.867, 23.1435
8. EASA 环境标准	噪声: ICAO 附件 16, 第 1 卷, 第 10 章 燃油和发动机排放: 不适用
Environmental Standards	Noise: ICAO Annex 16, Volume I, Chapter 10 Fuel venting & engine emission: N/A

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

1. 型号设计定义	文件 SPEC VA/149/PRD “型号设计构型数据 P.68R Victor”
Type Design Definition	doc. SPEC VA/149/PRD “Type Design Configuration Data P.68R Victor”
2. 描述	双发 (活塞), 高单翼, 可收放起落架
Description	Twin engine (piston), high wing monoplane with retractable landing gear
3. 设备	参见设备清单: 飞机序列号 s/n 40 见 AFM NOR10.707-30 第 6 部分, 意大利民航局批准号 No.149.624/T, 1978 年 7 月 27 日 序列号自 s/n 430 之后的飞机见文件 p/n NOR10.719-4 (见注释 2.2)
Equipment	Refer to Equipment List: Aircraft s/n 40: AFM NOR10.707-30, section 6, RAI approval No.149.624/T dated 27 July 1978 Aircraft from s/n 430: doc. p/n NOR10.719-4 (see Note 2.2)
4. 尺寸	长: 9.55 m (31.33 ft) [仅 s/n 40: 9.35 m (30.68 ft)] 高: 3.40 m (11.15 ft) 宽 (翼展): 12.00 m (39.37 ft)
Dimensions	Length: 9.55 m (31.33 ft)[only s/n 40: 9.35 m (30.68 ft)] Height: 3.40 m (11.15 ft)

	Width (Wing Span): 12.00 m (39.37 ft)
5. 发动机/Engine	
5.1 型号	2 台 Lycoming IO-360-A1B, 或 可选 2 台 Lycoming IO-360-A1B6
Model	2 Lycoming IO-360-A1B, or alternatively 2 Lycoming IO-360-A1B6
5.2 型号合格证	FAA 型号合格证 No. 1E10
Type Certificate	FAA Type Certificate No. 1E10 中国民航认可证: VTC045E CAAC Validation Type Certificate: VTC045E
5.3 限制	在 2700 rpm 时 200 HP (见注释 2.3), 其它发动机限制见《飞机飞行手册》“运行限制”部分
Limitations	200 HP at 2700 rpm (see Note 2.3) Other engine's limitations are listed in the "Aircraft Flight Manual", Operating Limitations Section
6. 载荷因子	见《飞机飞行手册》
Load factors	see Aircraft Flight Manual
7. 螺旋桨 /Propeller	
7.1 型号	2 个 Hartzell HC-C2YK-2C()F/FC7666A-4 调速器: 2 个 Hartzell model F6-3A, 或可选 2 个 Woodward model ()210655, 或可选 2 个 Woodward model ()210844 (见注释 2.10) 桨毂盖: 2 个 Hartzell model 836-29
Model	2 Hartzell HC-C2YK-2C()F/FC7666A-4 Governors: 2 Hartzell model F6-3A, or alternatively 2 Woodward model ()210655, or alternatively 2 Woodward model ()210844 (see Note 2.10) Spinners: 2 Hartzell model 836-29
7.2 型号合格证	FAA 型号合格证 No. P-920
Type Certificate	FAA Type Certificate No. P-920 中国民航认可证: VTC0156P CAAC Validation Type Certificate: VTC0156P
7.3 桨叶数/ Number of blades:	2
7.4 直径	1.829 m (72 in) – 不允许减小

Diameter	1.829 m (72 in) - No reduction permitted
7.5 转向	顺时针
Sense of Rotation	Clockwise
7.6 螺旋桨限制	在站位 0.762 m (30 in)处, 桨距设置为 最大+ 81.2° ± 0.3° 最小+ 14.2° ± 0.2°
Propeller limits	Pitch setting at station 0.762 m (30 in): Max + 81.2° ± 0.3° Min + 14.2° ± 0.2°
8. 液体 /Fluids	
8.1 燃油	100 或 100LL 级航空汽油, 根据 Textron Lycoming 公司服务指南 1070 最新版规定。
Fuel	Aviation Gasoline, grade 100 or 100LL, in accordance with latest issue of Textron Lycoming Service Instruction 1070
8.2 滑油	单粘度或多粘度滑油, 根据 Textron Lycoming 公 司 服 务指南 1014 最新版规定。
Oil	Single or multi-viscosity oils, in accordance with latest issue of Textron Lycoming Service Instruction 1014
8.3 冷却剂/ Coolant:	空气/ Air
9. 液体容量 (见注释 2.4) / Fluid capacities(see Note 2.4)	
9.1 燃油	总共: 在+0.77m (+30.3in) 处, 410 升 (108 U.S.Gal)
(见注释 2.5、2.6a 或 2.6b)	[205 升(54 U.S.Gal) /机翼油箱]
	不可用: 9 升 (2.5 U.S.Gal) /机翼油箱
Fuel	Total: 410 Lt (108 U.S.Gal)
(see Notes 2.5, 2.6a or 2.6b)	[205 Lt (54 U.S.Gal) per wing tank] at +0.770 m (+30.3 in)
	Unusable: 9 Lt (2.5 U.S.Gal) per wing tank
9.2 润滑油	总共: 在+0.100m (+4in) 处, 15 升 (16 U.S.qt)
	[7.5 升(8 U.S.qt)/发动机]
	不可用: 1.8 升 (1.9 U.S.qt)
Oil	Total: 15 Lt (16 U.S.qt) [7.5 Lt (8 U.S.qt) per engine] at +0.100 m (+4 in)
	Unusable: 1.8 Lt (1.9 U.S.qt)
9.3 冷却系统容量/ Coolant system capacity	不适用/ N/A
10. 空速 (见注释 2.14)	
不许超越速度 V _{NE} :	193 KCAS

最大结构巡航速度 V_{NO} :	153 KCAS
最小设计机动速度 V_A :	125 KCAS
襟翼展态速度 V_{FE} :	
襟翼 $0^\circ - 17^\circ$:	152 KCAS
襟翼 $17^\circ - 30^\circ$:	138 KCAS
襟翼 $30^\circ - 35^\circ$:	99 KCAS
最小操纵速度（单发） V_{MC} :	60 KCAS
最大起落架放出速度 V_{LE} :	112 KCAS (见注释 2.13)
最大起落架使用速度 V_{LO} :	112 KCAS (见注释 2.13)
Air Speeds (see Note 2.14)	
Never exceed speed V_{NE} :	193 KCAS
Max structural cruising speed V_{NO} :	153 KCAS
Design Manoeuvring Speed V_A :	125 KCAS
Flap Extended Speed V_{FE} :	
Flaps $0^\circ - 17^\circ$:	152 KCAS
Flaps $17^\circ - 30^\circ$:	138 KCAS
Flaps $30^\circ - 35^\circ$:	99 KCAS
Minimum Control Speed (Single Engine) V_{MC} :	60 KCAS
Max L/G Extended Speed V_{LE} :	112 KCAS (see Note 2.13)
Max L/G Operating Speed V_{LO} :	112 KCAS (see Note 2.13)
11. 最大运行高度/ Maximum Operating Altitude	不适用/N/A
12. 全天候运行能力	日/夜 – VFR、IFR，取决于所安装的设备 禁止在结冰条件下飞行
Allweather Operations Capability	Day/Night-VFR, IFR, depending on installed equipment. Flight in icing conditions is prohibited
13. 最大重量（见注释 2.14）	
起飞	1960 公斤（4321 磅）
着陆	1960 公斤（4321 磅）
Maximum Weights (see Note 2.14)	
Take-Off	1960 kg (4321 lb)
Landing	1960 kg (4321 lb)
14. 重心范围（见注释 2.7 和 2.14）	
后部限制	任一重量下，基准面后+0.526 m (+20.7 in) (34% MAC)
前部限制	重量 1960 kg (4321 lb)时，基准面后+0.325 m (+12.8 in) (21% MAC) 重量小等于 1600 kg (3527 lb)时，基准面后+0.259 m

	(+10.2 in) (16.8% MAC)
	对于中间重量, 重心位置值呈线性变化
Centre of Gravity Range: (see Note 2.7 and 2.14)	
Rearward Limits:	+0.526 m (+20.7 in) aft of datum (34% MAC) for any Weight
Forward Limits	+0.325 m (+12.8 in) aft of datum (21% MAC) at 1960 kg (4321 lb)
	+0.259 m (+10.2 in) aft of datum (16.8% MAC) at 1600 kg (3527 lb) or less
	with linear variation for intermediate weights
15. 基准面	与机翼前缘相切
Datum	Tangent to the wing leading edge
16. 控制面偏转	
襟翼	向下: $35^{\circ} \pm 2^{\circ}$
副翼	向上: $30^{\circ} \pm 2^{\circ}$ 向下: $17^{\circ} \pm 2^{\circ}$
平尾 (前缘)	向上: $6^{\circ} \pm 2^{\circ}$ 向下: $16^{\circ} \pm 2^{\circ}$
平尾调整片 (后缘)	向下: $1^{\circ} \pm 1^{\circ}$ (最小)
(相对于平尾弦)	$15^{\circ} \pm 1^{\circ}$ (最大)
方向舵	向右: $25^{\circ} \pm 2^{\circ}$ 向左: $25^{\circ} \pm 2^{\circ}$
方向舵调整片	向右: $30^{\circ} \pm 2^{\circ}$ 向左: $30^{\circ} \pm 2^{\circ}$
Control surface deflections	
Wing Flaps	Down: $35^{\circ} \pm 2^{\circ}$
Ailerons	Up: $30^{\circ} \pm 2^{\circ}$ Down: $17^{\circ} \pm 2^{\circ}$
Stabilator (leading edge)	Up: $6^{\circ} \pm 2^{\circ}$ Down: $16^{\circ} \pm 2^{\circ}$
Stabilator tab (trailing edge)	Down: $1^{\circ} \pm 1^{\circ}$ (min)
(with respect to stabilator chord)	$15^{\circ} \pm 1^{\circ}$ (max)
Rudder	Right: $25^{\circ} \pm 2^{\circ}$ Left: $25^{\circ} \pm 2^{\circ}$
Rudder tab	Right: $30^{\circ} \pm 2^{\circ}$ Left: $30^{\circ} \pm 2^{\circ}$
17. 水平基准	
横向	与座椅轨道交叉
纵向	在 8 号和 9 号框之间, 机身左侧两个螺栓处。
Levelling Means	
Lateral	Across seat tracks
Longitudinal	Two screws on the fuselage left side, between frames No.8 and 9
18. 最小飞行机组	1 个 (驾驶员)

Minimum Flight Crew	1 (Pilot)
19. 最多座位数（见注释 2.8）	6 个，分布如下： -0.950 m (-37.4 in)处 2 个， -0.146 m (-5.7 in) 处 2 个， +0.867 m (+34.2 in) 处 2 个
Maximum Seating Capacity (see Note C/8)	Total 6, distributed as follows: 2 at -0.950 m (-37.4 in), 2 at -0.146 m (-5.7 in), 2 at +0.867 m (+34.2 in)
20. 行李舱/货舱	
最大允许载荷	181 kg (400 lb)
位置	+1.542 m (+60.7 in)
Baggage/Cargo Compartments	
Max Allowable Load	181 kg (400 lb)
Location	+1.542 m (+60.7 in)
21. 机轮和轮胎	见《飞机飞行手册》
Wheels and Tyres	see Aircraft Flight Manual
22. 保留/ Reserved	

IV. 操作及维护说明/Operating and Service Instructions

1. 飞行手册（见注释 2.9）	飞机 s/n 40: 见文件 doc. p/n NOR10.707-30 飞机 s/n 430: 见文件 doc. p/n NOR10.707-30B 飞机 s/n 从 453 以后: 见文件 p/n NOR10.707-30C 最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型飞机技术文件目录”
Flight Manual(see Note 2.9)	Aircraft s/n 40: doc. p/n NOR10.707-30 Aircraft s/n 430: doc. p/n NOR10.707-30B Aircraft from s/n 453: doc. p/n NOR10.707-30C Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of Technical Publications” for latest applicable revision
2. 技术手册	-飞机维修手册: 飞机 s/n 40 和 430: 见文件 doc. p/n NOR10.709-9 和所有可用的补充材料 飞机 s/n 从 453 以后: 见文件 doc. p/n AMM10.702-3 最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型飞机技术文件目录”

	- 服务通告、指南和信函 见文件 doc. p/n NOR10.777-1 “P.68 型飞机, 服务通告、服务信函和服务指南目录”
Technical Manual	- Airplane Maintenance Manual: Aircraft s/n 40 and 430: doc. p/n NOR10.709-9 and all applicable Supplements Aircraft from s/n 453: doc. p/n AMM10.702-3 Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of Technical Publications” for latest applicable revision - Service Bulletins, Instructions and Letters Refer to doc. p/n NOR10.777-1 “P.68 Variants, Index of Service Bulletins, Service Letters and Service Instructions”
3. 图解零件目录	飞机 s/n 40 和 430: 见文件 doc. p/n NOR10.711-9 和所有可用的补充材料 飞机 s/n 从 453 以后: 见文件 doc. p/n IPC10.703-3 最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型飞机技术文件目录”
Spare Parts Catalogue (IPC)	Aircraft s/n 40 and 430: doc. p/n NOR10.711-9 and all applicable Supplements Aircraft from s/n 453: doc. p/n IPC10.703-3 Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of Technical Publications” for latest applicable revision
4. 电器件和主要件 Instruments and aggregates	见可用的 AFM 和 AMM Refer to applicable AFM and AMM

V. 注释/ Notes

注释**2.1:** 型号设计更改的审定基础

NOTE 2.1: CERTIFICATION BASIS OF TYPE DESIGN CHANGES

对于型号设计更改No. MOD P68/83 “在P.68R飞机上安装机组门”和MOD P68/84 “移除应急窗和P.68R飞机上新的撤离指示”（这两个更改不能单独做），除了P.68R审定基础以外，下述适航要求的修订案和等效安全水平适用：

FAR 23 Amdt 14: § 23.1309

FAR 23 Amdt 49: § 23.807

等效安全水平:

FAR23.807(a)(4) Amdt.49, 等效于2003年11月11日发布的EASA CS23 §23.807(a)(4) [参考2007年8月21日发布的EASA CRI D-02 第3版 “机组舱门升级为应急舱门，所以移除应急窗口”]

等效安全水平:

FAR 23.783(b) Amdt.6 [参考2007年1月18日发布的EASA CRI D-01版“P.68R 机组舱门安装”]

For Type Design Changes No. MOD P68/83 “Crew door installation on P.68R variant” and MOD P68/84 “Emergency window removal and new evacuation instructions on P.68R variant” (which cannot be implemented separately), in addition to P.68R certification basis, the following amendments of airworthiness requirements and Equivalent Level Of Safety are applicable:

FAR 23 Amdt 14: § 23.1309

FAR 23 Amdt 49: § 23.807

Equivalent Level Of Safety:

FAR23.807(a)(4) Amdt.49, equivalent to EASA CS23 dated 14/11/2003 §23.807(a)(4) [ref. EASA CRI D-02 issue 3 dated 21/08/2007 “Crew door upgrading to emergency door resulting from emergency window removal”]

Equivalent Level Of Safety:

FAR 23.783(b) Amdt.6 [ref. EASA CRI D-01 issue 2 dated 18/01/2007 “P.68R crew door installation”]

对于型号设计更改No. MOD P68/123 “SAGEM 航电集成驾驶舱安装 (IFR)”，除了P.68R审定基础以外，下述适航要求的修订案和等效安全水平适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1327, 23.1331, 23.1337, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 1549, 23.1559, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303

专用条件:

JAR 23 Amdt 1 par. 23.1309(e) 根据JAA INT/POL/23/1 [参考2008年3月21日发布的EASA CRI F-01 第3版“HIRF 保护”]

等效安全水平:

1994年3月11日生效的JAR 23 para. 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [参考2008年3月25日发布的EASA CRI G-01 第8版“Sagem 航电显示空速标记”]

For Type Design Change No. MOD P68/123 “SAGEM Avionics Integrated cockpit installation (IFR)”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements and Equivalent Level Of Safety are applicable:

JAR 23 effective 11 March 1994:

§§ 23.1, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1327, 23.1331, 23.1337, 23.1351, 23.1357, 23.1359, 23.1365,

23.1367, 23.1381, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 1549, 23.1559, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303

Special Condition:

JAR 23 Amdt 1 par. 23.1309(e) according to JAA INT/POL/23/1 [ref. EASA CRI F-01 issue 3 dated 21/03/2008 “HIRF protection”]

Equivalent Level Of Safety:

JAR 23 effective 11 March 1994 para. 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [ref. EASA CRI G-01 issue 8 dated 25/03/2008 “Sagem Avionics Display Airspeed Markings”]

对于型号设计更改No. MOD P68/126 “Garmin GNS 430W/530W (WAAS)系统安装”，除了P.68R审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585, 23.1589

For Type Design Change No. MOD P68/126 “Garmin GNS 430W/530W (WAAS) system installation”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585, 23.1589

对于型号设计更改No. MOD P68/127 “P68R飞机上S-Tec 55X自动驾驶仪扩展”，除了P.68R审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.29, 23.143, 23.253, 23.601, 23.603, 23.605, 23.607, 23.609, 23.685, 23.689, 23.1529, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 18:

§§ 23.1301, 23.1309, 23.1321, 23.1329, 23.1357, 23.1365, 23.1367, 23.1381, 23.1431

FAR 23 Amdt 49: § 23.1359

For Type Design Change No. MOD P68/127 “Extension of S-Tec 55X - Autopilot on P68R a/c”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.29, 23.143, 23.253, 23.601, 23.603, 23.605, 23.607, 23.609, 23.685, 23.689, 23.1529, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 18:

§§ 23.1301, 23.1309, 23.1321, 23.1329, 23.1357, 23.1365, 23.1367, 23.1381, 23.1431

FAR 23 Amdt 49: § 23.1359

对于型号设计更改No. MOD P68/150 “从P.68R型飞机标准航程构型延程到长航程构型”，除了P.68R审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.601, 23.603, 23.605, 23.609, 23.611, 23.951, 23.959, 23.963, 23.964, 23.967, 23.969, 23.971, 23.975, 23.993, 23.1501, 23.1581, 23.1585

FAR 23 Amdt 7:

§§ 23.471, 23.473, 23.477, 23.479, 23.483, 23.485, 23.493

For Type Design Change No. MOD P68/150 “Extension from Standard Range configuration to Long Range Configuration for P.68R Model”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.601, 23.603, 23.605, 23.609, 23.611, 23.951, 23.959, 23.963, 23.964, 23.967, 23.969, 23.971, 23.975, 23.993, 23.1501, 23.1581, 23.1585

FAR 23 Amdt 7:

§§ 23.471, 23.473, 23.477, 23.479, 23.483, 23.485, 23.493

对于型号设计更改No. MOD P68/151 “P.68R MTOW增加到2063 kg (4548 lb)”，除了P.68R审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.29, 23.143, 23.253, 23.1301, 23.1311, 23.1321, 23.1501, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1549, 23.1559, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: §§ 23.572, 23.1323

For Type Design Change No. MOD P68/151 “P.68R MTOW increase up to 2063 kg (4548 lb)”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.29, 23.143, 23.253, 23.1301, 23.1311, 23.1321, 23.1501, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1549, 23.1559, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: §§ 23.572, 23.1323

对于型号设计更改No. MOD P68/195 “P.68R飞机Sagem 玻璃驾驶舱（IFR）内，用Axitude AX1-200替换Cross Bow 500GA”，除了P.68R审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.23, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.1301, 23.1309, 23.1351, 23.1357, 23.1359

FAR 23 Amdt 57（依据选定的符合基础）: § 23.1308

For Type Design Change No. MOD P68/195 “Replacing Cross Bow 500GA with Axitude AX1-200 in Sagem glass cockpit (IFR) for P.68R”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.1, 23.23, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.1301, 23.1309, 23.1351, 23.1357, 23.1359

FAR 23 Amdt 57 (on elect to comply basis): § 23.1308

对于型号设计更改No. MOD P68/208 “P.68R飞机 V_{LE}/V_{LO} 增加”，除了P.68R审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.25, 23.29, 23.141, 23.143, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.1301, 23.1322, 23.1501, 23.1529, 23.1541, 23.1563, 23.1583, 23.1585

FAR 23 Amdt 17: § 23.1309

For Type Design Change No. MOD P68/208 “P.68R, V_{LE}/V_{LO} increase”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.25, 23.29, 23.141, 23.143, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.1301, 23.1322, 23.1501, 23.1529, 23.1541, 23.1563, 23.1583, 23.1585

FAR 23 Amdt 17: § 23.1309

对于型号设计更改No. MOD P68/223 “固定式氧气系统组件安装”，除了P.68R审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.601, 23.603, 23.605, 23.625, 23.1357, 23.1367, 23.1501, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 9: § 23.1449

FAR 23 Amdt 17: § 23.1309

FAR 23 Amdt 36: § 23.561

FAR 23 Amdt 43: §§ 23.1441, 23.1443, 23.1445

FAR 23 Amdt 49: §§ 23.1447, 23.1451, 23.1453

For Type Design Change No. MOD P68/223 “Fixed oxygen system kit installation”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.601, 23.603, 23.605, 23.625, 23.1357, 23.1367, 23.1501, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 9: § 23.1449

FAR 23 Amdt 17: § 23.1309

FAR 23 Amdt 36: § 23.561

FAR 23 Amdt 43: §§ 23.1441, 23.1443, 23.1445

FAR 23 Amdt 49: §§ 23.1447, 23.1451, 23.1453

对于型号设计更改No. MOD P68/229 “替换起落架应急放出系统的氮气罐”，除了P.68R审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23 : §§ 23.1501, 23.1529

2001年2月1日生效的JAR 23 Amdt 1 : §§ 23.601, 23.603, 23.605

FAR 23 Amdt 14: § 23.1435

FAR 23 Amdt 17: § 23.1309

For Type Design Change No. MOD P68/229 “Landing gear emergency extension system, nitrogen reservoir replacement”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994: §§ 23.1501, 23.1529

JAR 23 Amdt 1 effective 01 February 2001: §§ 23.601, 23.603, 23.605

FAR 23 Amdt 14: § 23.1435

FAR 23 Amdt 17: § 23.1309

对于型号设计更改No. MOD P68/240 “Garmin G950航电安装”，除了P.68R审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.623, 23.625, 23.627, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1331, 23.1337, 23.1351, 23.1353, 23.1357, 23.1359, 23.1361, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1547, 23.1549, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303,

专用条件:

2011年8月3日发布的EASA CRI F-01 第3版 “HIRF 保护 – 集成航电系统” [JAA INT/POL/23/1 第1版]

专用条件:

2011年8月3日发布的EASA CRI B-01 第3版 “集成航电系统中的人为因素” [SC/P68 SERIE/04]

For Type Design Change No. MOD P68/240 “Garmin G950 avionics installation”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.623, 23.625, 23.627, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1331, 23.1337, 23.1351,

23.1353, 23.1357, 23.1359, 23.1361, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1547, 23.1549, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303,

Special Condition:

EASA CRI F-01 issue 3 dated 03/08/2011 “HIRF Protection - Integrated Avionics Systems” [JAA INT/POL/23/1 issue 1]

Special Condition:

EASA CRI B-01 issue 3 dated 03/08/2011 “Human Factors in Integrated Avionics Systems” [SC/P68 SERIE/04]

对于型号设计更改No. MOD P68/247 “Sagem 航电集成驾驶舱安装的软件更改”，除了P.68R审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.1301, 23.1309, 23.1311, 23.1545, 23.1581, 23.1583

等效安全水平:

1994年3月11日生效的JAR 23, 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [参考2010年9月29日发布的EASA CRI G-01 第5版 “Sagem 航电显示空速标记”]

For Type Design Change No. MOD P68/247 “Software change to Sagem Avionics integrated cockpit installation”, in addition to P.68R Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.1301, 23.1309, 23.1311, 23.1545, 23.1581, 23.1583

Equivalent Level Of Safety:

JAR 23 effective 11 March 1994 par. 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [ref. EASA CRI G-01 issue 5 dated 29/09/2010 “Sagem Avionics Display Airspeed Markings”]

注释2.2: 对于第一次审查，由适航设计标准（见审定基础）要求的基本设备应安装在飞机上。

此外，还需要下列设备：

- Safe Flight Instrument Corp.失速前探测器164型，或等对于第一次审查效仪表
- 飞机飞行手册（见2. IV）

NOTE 2.2: Basic equipment required by the applicable airworthiness design standard (see certification basis) shall be installed in the aircraft for the first certification.

In addition, the following equipment are required:

- Safe Flight Instrument Corp. pre-stall detector Type 164, or equivalent
- Aircraft Flight Manual (see § 2. IV)

注释2.3: 对于IO-360-A1B发动机, 在2100和2350rpm之间, 不允许连续运行。

NOTE 2.3: Continuous operation between 2100 and 2350 rpm is not permitted for IO-360-A1B engine.

注释2.4: 在确定空重和相关重心位置时, 必须包括下面所标出的不可用燃油和发动机未排出的润滑油:

- 不可用燃油: 对于机翼主油箱, 在0.770m (+30.3in) 处12.9kg (28.44lb) ,
对于机翼副油箱, 在0.770m (+30.3in) 处5.7kg (12.57lb)
(见注释2.5) 。
- 未排出的润滑油: 在0.100m (+4in) 处0.454kg (1lb) 。

NOTE 2.4: For the determination of the empty weight and associated centre of gravity position, unusable fuel and engine undrainable lubricant must be included as noted below:

- Unusable Fuel: 12.9 kg (28.44 lb) at +0.770 m (+30.3 in) for the main wing tanks
and 5.7 kg (12.57 lb) at +0.770 m (+30.3 in) for the auxiliary wing
tank (see Note 2.5)
- Undrainable Lubricant: 0.454 kg (1 lb) at +0.100 m (+4 in)

注释2.5: 对于装有两个备用整体油箱, 且油箱带有输送泵的P.68R飞机, 全部油量为580 Lt (153 U.S.Gal), 分布如下:

- 2个机翼主油箱 在+0.770 m (+30.3 in) 处, 205 Lt (54 U.S.Gal)/油箱
不可用: 9 Lt (2.5 U.S.Gal) /油箱
- 2个机翼副油箱 在+0.770 m (+30.3 in) 处, 85 Lt (22.5 U.S.Gal) /油箱
不可用: 4 Lt (1 U.S.Gal) /油箱

NOTE 2.5: For P.68R aircraft equipped with two auxiliary integral fuel tanks with transfer pumps, the total fuel capacity is 580 Lt (153 U.S.Gal) distributed as follows:

- 2 Main Wing Tanks 205 Lt (54 U.S.Gal) per tank at +0.770 m (+30.3 in)
Unusable: 9 Lt (2.5 U.S.Gal) per tank
- 2 Auxiliary Wing Tanks 85 Lt (22.5 U.S.Gal) per tank at +0.770 m (+30.3 in)
Unusable: 4 Lt (1 U.S.Gal) per tank.

注释2.6a: 对于装有Partenavia 组件 P/N 68-015的P.68R飞机, 全部油量为538 Lt (142 U.S.Gal), 分布如下:

- 2个主机翼油箱 在+0.770 m (+30.3 in) 处, 269 Lt (71 U.S.Gal)/ 油箱
不可用: 9 Lt (2.5 U.S.Gal) /油箱

注释2.6b: 对于装有MOD P68/150的P.68R飞机, 下列机翼油箱构型被批准:

- 标准航程
总燃油量: 在+0.770 m (+30.3 in) 处, 538 Lt (142 U.S.Gal)
总不可用油量: 18 Lt (4.7 U.S.Gal)
- 长航程

总燃油量: 在+0.770 m (+30.3 in) 处, 696 Lt (184 U.S.Gal)

总不可用油量: 26 Lt (6.9 U.S.Gal)

NOTE 2.6a: For P.68R aircraft equipped with Partenavia Kit P/N 68-015, the total fuel capacity is 538 Lt (142 U.S.Gal) distributed as follows:

- 2 Main Wing Tanks 269 Lt (71 U.S.Gal) per tank at +0.770 m (+30.3 in)
Unusable: 9 Lt (2.5 U.S.Gal) per tank

NOTE 2.6b: For P.68R aircraft embodying MOD P68/150, the following wing fuel tank configurations are approved:

- STANDARD RANGE

Total fuel capacity: 538 Lt (142 U.S.Gal) at +0.770 m (+30.3 in)
Total unusable fuel: 18 Lt (4.7 U.S.Gal)

- LONG RANGE

Total fuel capacity: 696 Lt (184 U.S.Gal) at +0.770 m (+30.3 in)
Total unusable fuel: 26 Lt (6.9 U.S.Gal)

注释2.7: 起落架收放导致的重心变化可忽略不计。

NOTE 2.7: Displacements of Centre of Gravity due to the landing gear retraction and extension are negligible.

注释2.8: 对于使用Partenavia服务通告No.29的P.68R飞机, 座位数是7, 位置分布如下:

2个在-0.950 m (-37.4 in)处,
2个在-0.146 m (-5.7 in)处,
3个乘客坐在长凳座椅上, 位于+0.867 m (+34.2 in)

NOTE 2.8: For P.68R aircraft embodying Partenavia Service Bulletin No.29, the number of seats is 7, distributed as follows:

2 at -0.950 m (-37.4 in),
2 at -0.146 m (-5.7 in),
3 passengers on the bench seat, at +0.867 m (+34.2 in)

注释2.9: 下列标牌应被安装在驾驶员视野内: “本机必须按正常类飞机运行, 应遵守标牌、标记和手册中声明的运行限制。”

此外, 所有《飞机飞行手册》中要求的标牌都应安装在正确位置处。

NOTE 2.9: The following placard shall be installed in full view of pilot:

“THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS AND MANUALS”

Moreover all placards required in the Aircraft Flight Manual shall be installed in the proper location.

注释2.10: 从s/n430以后的P.68R飞机出厂时可以配有调节器“MT-Propeller”(根据更改No. MOD P68/111): P-881-30 (左), P-881-31 (右)。

NOTE 2.10: P.68R aircraft from s/n 430 onwards may be equipped since new with governors “MT-Propeller” (as per Change No. MOD P68/111): P-881-30 (left), P-881-31 (right).

注释 2.11: 从 s/n430 以后的 P.68R 飞机出厂时可以配有被批准用于 IFR 运行的 SAGEM 航电集成显示系统, 以代替标准仪表盘布局 (根据型号设计更改 No.MOD P68/123 和 MOD P68/195)。

NOTE 2.11: P.68R aircraft from s/n 430 onwards may be equipped since new with a SAGEM Avionics Integrated Display System approved for IFR operations, in lieu of the standard instrument panel layout (as per Type Design Changes No. MOD P68/123 and MOD P68/195).

注释2.12: 从s/n430以后的P.68R飞机出厂时可以配有一套S-Tec 55X自动驾驶仪 (根据型号设计更改No. MOD P68/127)。

NOTE 2.12: P.68R aircraft from s/n 430 onwards may be equipped since new with a S-Tec 55X Autopilot (as per Type Design Change No. MOD P68/127).

注释2.13: 下列空速限制用于从s/n430以后的P.68R飞机 (根据型号设计更改No. MOD P68/208)。

最大起落架放下速度 V_{LE} : 131 KCAS

最大起落架放下速度 V_{LO} (放下): 131 KCAS

最大起落架收起速度 V_{LO} (收起): 112 KCAS

NOTE 2.13: The following airspeed limitation applies to P.68R aircraft from s/n 430 onwards (as per Type Design Change No. MOD P68/208):

Maximum Landing Gear Extended Speed V_{LE} : 131 KCAS

Maximum Landing Gear Extension Speed V_{LO} (Extension): 131 KCAS

Maximum Landing Gear Retraction Speed V_{LO} (Retraction): 112 KCAS

注释2.14: 实施了型号设计更改No. MOD P68/151或者使用了Vulcanair服务通告No. 198的P.68R飞机, 在上述运行限制下, 最大起飞重量2063 kg (4548 lb) 被批准:

- 空速:

不许超越速度 V_{NE} : 197 KCAS

最大结构巡航速度 V_{NO} : 157 KCAS

最小设计机动速度 V_A : 127 KCAS

襟翼展态速度 V_{FE} :

15°襟翼 152 KCAS

30°襟翼 138 KCAS

35°襟翼 101 KCAS

最小操纵速度 (单发) V_{MC} : 60 KCAS

- 最大重量:

起飞: 2063 kg (4548 lb)

着陆: 1960 kg (4321 lb)

零燃油: 1960 kg (4321 lb)

- 重心范围:

后部限制: 对任何重量, 基准面后+0.526 m (+20.7 in) (34% MAC)

前部限制: 重量2063 Kg (4548 lb) 时, 基准面后+0.344 m (+13.54 in) (22.2% MAC)

重量小等于1600 Kg (3527 lb) 时, 基准面后+0.259 m (+10.20 in) (16.8% MAC)

对于中间重量, 重心位置值呈线性变化

NOTE 2.14: P.68R aircraft embodying Type Design Change No. MOD P68/151 or applying Vulcanair Service Bulletin No. 198 are approved for a Maximum Take Off Weight of 2063 kg (4548 lb), with the following Operating Limitations:

- Air Speeds:

Never exceed speed V_{NE} : 197 KCAS

Maximum structural cruising speed V_{NO} : 157 KCAS

Design Manoeuvring Speed V_A : 127 KCAS

Flaps Extended Speed V_{FE} :

15° Flaps 152 KCAS

30° Flaps 138 KCAS

35° Flaps 101 KCAS

Minimum Control Speed (Single Engine) V_{MC} : 60 KCAS

- Maximum Masses:

Take Off: 2063 kg (4548 lb)

Landing: 1960 kg (4321 lb)

Zero Fuel: 1960 kg (4321 lb)

- Centre of Gravity Range:

Rearward Limits: +0.526 m (+20.7 in) aft of datum (34% MAC) for any weight

Forward Limits: +0.344 m (+13.54 in) aft of datum (22.2% MAC) at 2063 Kg (4548 lb)

+0.259 m (+10.20 in) aft of datum (16.8% MAC) at 1600 Kg (3527 lb) or less
with linear variation between given points.

注释2.15: 从s/n430以后的P.68R飞机出厂时或实施了Vulcanair服务通告No. 193可配置固定式氧气系统组件 (根据型号设计更改No. MOD P68/223)。

NOTE 2.15: P.68R aircraft from s/n 430 onwards may be equipped since new or applying Vulcanair Service Bulletin No. 193 with a fixed oxygen system kit (as per Type Design Change No. MOD P68/223).

注释**2.16**: 从s/n 458以后的P.68R飞机, 可以配置Garmin G950集成驾驶舱系统(根据型号设计更改No. MOD P68/240):

NOTE 2.16: P.68R aircraft from s/n 458 onwards may be equipped with Garmin G950 Integrated Flight Deck System (as per Type Design Change No. MOD P68/240).

第 3 部分 P.68C

SECTION 3 P.68C

I.概述/General

1. 衍生型或型别/Variant or Model	P.68C
适航类别/Airworthiness Category	正常类航空器/ Normal Category aircraft
型号合格证持有人/Type Certificate Holder	VULCANAIR S.P.A. via Giovanni Pascoli, 7 80026 - Casoria (Napoli) Italy.
制造商/Manufacture	VULCANAIR S.P.A. via Giovanni Pascoli, 7 80026 - Casoria (Napoli) Italy.
2. 申请审查日期/ Certification Application Date	1979.01.02/ 2 January 1979
3. 当局型号审查日期	1979.07.23 (RAI TC No. A151; 1998 年 11 月 25 日重新发布 ENAC TC No. A 365)
National Authority Type Certificate Date	23 July 1979 (RAI TC No. A 151; reissued as ENAC TC No. A 365 dated 25 November 1998)

II.审定基础/Certification Basis

1. 确定可使用的要求的参考日期	1979.01.02
Reference Date for determining the applicable requirements	2 January 1979
2. 适航要求	FAR 23 部 (1965 年 2 月 1 日生效), 包括第 23-1 至第 23-6 修正案 (见注释 3.1)
Airworthiness Requirements	FAR 23 effective 1 February 1965 including Amdt 1 through 6 (see Note 3.1)
3. EASA 专用条件/ Special Conditions	无/ None
4. EASA 豁免/ Exemptions	无/ None
5. EASA 偏离/ Deviations	无/ None
6. EASA 等效安全/ Equivalent Safety Findings	无/ None

7. 所选的符合性要求	无
Requirements elected to comply	None
8. EASA 环境标准	噪声: ICAO 附件 16, 第 1 卷, 第 10 章
	燃油和发动机排放: 不适用
Environmental Standards	Noise: ICAO Annex 16, Volume I, Chapter 10
	Fuel venting & engine emission: N/A

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

1. 型号设计定义	文件 SPEC VA/137/PRD “型号设计构型数据 P.68C”
Type Design Definition	doc. SPEC VA/137/PRD “Type Design Configuration Data P.68C”
2. 描述	双发 (活塞), 高单翼, 固定式前三点起落架
Description	Twin engine (piston), high wing monoplane with fixed tricycle landing gear
3. 设备	参见《飞机飞行手册》doc. p/n NOR10.719-1 中“设备清单”(见注释 3.2)
Equipment	Refer to Equipment List of “Aircraft Flight Manual” doc. p/n NOR10.719-1 (see Note 3.2)
4. 尺寸	长: 9.55 m (31.33 ft)
	高: 3.40 m (11.15 ft)
	宽 (翼展): 12.00 m (39.37 ft)
Dimensions	Length: 9.55 m (31.33 ft)
	Height: 3.40 m (11.15 ft)
	Width (Wing Span): 12.00 m (39.37 ft)
5. 发动机/Engine	
5.1 型号	2 台 Lycoming IO-360-A1B6
Model	2 Lycoming IO-360-A1B6
5.2 型号合格证	FAA 型号合格证 No. 1E10
Type Certificate	FAA Type Certificate No. 1E10
	中国民航认可证: VTC045E
	CAAC Validation Type Certificate: VTC045E
5.3 限制	在 2700 rpm 时 200 HP
	其它发动机限制见《飞机飞行手册》“运行限制”部分
Limitations	200 HP at 2700 rpm

	Other engine's limitations are listed in the "Aircraft Flight Manual", Operating Limitations Section
6. 载荷因子	见《飞机飞行手册》
Load factors	see Aircraft Flight Manual
7. 螺旋桨 /Propeller	
7.1 型号	2 个 Hartzell HC-C2YK-2C()F/FC7666A-4 调速器: 2 个 Woodward model ()210655, 或可选 2 个 Woodward model ()210844 (见注释 3.10) 桨毂盖: 2 个 Hartzell model 836-29
Model	2 Hartzell HC-C2YK-2C()F/FC7666A-4 Governors: 2 Woodward model ()210655, or alternatively 2 Woodward model ()210844 (see Note 3.10) Spinners: 2 Hartzell model 836-29
7.2 型号合格证	FAA 型号合格证 No. P-920
Type Certificate	FAA Type Certificate No. P-920 中国民航认可证: VTC0156P CAAC Validation Type Certificate: VTC0156P
7.3 桨叶数/ Number of blades:	2
7.4 直径	1.829 m (72 in) – 不允许减小
Diameter	1.829 m (72 in) - No reduction permitted
7.5 转向	顺时针
Sense of Rotation	Clockwise
7.6 螺旋桨限制	在站位 0.762 m (30 in)处, 桨距设置为 最大+ $81.2^{\circ} \pm 0.3^{\circ}$ 最小+ $14.2^{\circ} \pm 0.2^{\circ}$
Propeller limits	Pitch setting at station 0.762 m (30 in): Max + $81.2^{\circ} \pm 0.3^{\circ}$ Min + $14.2^{\circ} \pm 0.2^{\circ}$
8. 液体 /Fluids	
8.1 燃油	100 或 100LL 级航空汽油, 根据 Textron Lycoming 公司服务指南 1070 最新版规定。
Fuel	Aviation Gasoline, grade 100 or 100LL, in accordance with latest issue of Textron Lycoming Service Instruction 1070
8.2 滑油	单粘度或多粘度滑油, 根据 Textron Lycoming 公司服

	务指南 1014 最新版规定。
Oil	Single or multi-viscosity oils, in accordance with latest issue of Textron Lycoming Service Instruction 1014
8.3 冷却剂/ Coolant:	空气/ Air
9. 液体容量/ Fluid capacities	
9.1 燃油	一直到 s/n209:
(见注释 3.3、3.4 和 3.5)	总共: 在+0.77m (+30.3in) 处, 410 升 (108 U.S.Gal) [205 升 (54 U.S.Gal) /机翼油箱]
	不可用: 9 升 (2.5 U.S.Gal) /机翼油箱
	从 s/n210 以后: (见注释 3.6)
	总共: 在+0.77m (+30.3in) 处, 538 升 (142 U.S.Gal) [269 升 (71 U.S.Gal) /机翼油箱]
	不可用: 9 升 (2.5 U.S.Gal) /机翼油箱
Fuel	Up to s/n 209:
(see Notes 3.3, 3.4 and 3.5)	Total: 410 Lt (108 U.S.Gal) [205 Lt (54 U.S.Gal) per wing tank] at +0.770 m (+30.3 in)
	Unusable: 9 Lt (2.5 U.S.Gal) per wing tank
	From s/n 210 onwards: (see Note 3.6)
	Total: 538 Lt (142 U.S.Gal) [269 Lt (71 U.S.Gal) per wing tank] at +0.770 m (+30.3 in)
	Unusable: 9 Lt (2.5 U.S.Gal) per wing tank
9.2 润滑油	总共: 在+0.100m (+4in) 处, 15 升 (16 U.S.qt) [7.5 升(8 U.S.qt)/发动机]
	不可用: 1.8 升 (1.9 U.S.qt)
Oil	Total: 15 Lt (16 U.S.qt) [7.5 Lt (8 U.S.qt) per engine] at +0.100 m (+4 in)
	Unusable: 1.8 Lt (1.9 U.S.qt)
9.3 冷却系统容量/ Coolant system capacity	不适用/ N/A
10. 空速 (见注释 3.7)	
不许超越速度 V_{NE} :	193 KCAS
最大结构巡航速度 V_{NO} :	153 KCAS
最小设计机动速度 V_A :	126 KCAS
襟翼展态速度 V_{FE} :	

襟翼 0° - 17°:	152 KCAS
襟翼 17° - 30°:	138 KCAS
襟翼 30° - 35°:	99 KCAS
最小操纵速度 (单发) V_{MC} :	60 KCAS
Air Speeds (see Note 3.7)	
Never exceed speed V_{NE} :	193 KCAS
Max structural cruising speed V_{NO} :	153 KCAS
Design Manoeuvring Speed V_A :	126 KCAS
Flap Extended Speed V_{FE} :	
Flaps 0° - 17°:	152 KCAS
Flaps 17° - 30°:	138 KCAS
Flaps 30° - 35°:	99 KCA S
Minimum Control Speed (Single Engine) V_{MC} :	60 KCAS
11. 最大运行高度/ Maximum Operating Altitude	不适用/N/A
12. 全天候运行能力	日/夜 – VFR、IFR, 取决于所安装的设备 禁止在结冰条件下飞行
Allweather Operations Capability	Day/Night-VFR, IFR, depending on installed equipment. Flight in icing conditions is prohibited
13. 最大重量 (见注释 3.7 和 3.14)	
起飞	1990 公斤 (4387 磅)
着陆	直到 s/n 380: 1890 公斤 (4167 磅) s/n 380 以后: 1980 公斤 (4365 磅)
Maximum Weights (see Note 3.7 and 3.14)	
Take-Off	1990 kg (4387 lb)
Landing	1890 kg (4167 lb) up to s/n 380 1980 kg (4365 lb) from s/n 381 onwards
14. 重心范围 (见注释 3.7)	
后部限制	任一重量下, 基准面后+0.526 m (+20.7 in) (34% MAC)
前部限制	重量 1990 kg (4387 lb)时, 基准面后+0.300 m (+11.81 in) (19.36% MAC) 重量小等于 1680 kg (3704 lb)时, 基准面后+0.230 m (+9.06 in) (14.84% MAC) 对于中间重量, 重心位置值呈线性变化
Centre of Gravity Range: (see Note 3.7)	
Rearward Limits:	+0.526 m (+20.7 in) aft of datum (34% MAC) for any Weight

Forward Limits	+0.300m (+11.81 in) aft of datum (19.36% MAC) at 1990 kg (4387 lb) +0.230 m (+9.06 in) aft of datum (14.84% MAC) at 1680 kg (3704 lb) or less with linear variation for intermediate weights 与机翼前缘相切 Tangent to the wing leading edge	
15. 基准面		
Datum	Tangent to the wing leading edge	
16. 控制面偏转		
襟翼	向下: $35^{\circ} \pm 2^{\circ}$	
副翼	向上: $30^{\circ} \pm 2^{\circ}$	向下: $17^{\circ} \pm 2^{\circ}$
平尾 (前缘)	向上: $6^{\circ} \pm 2^{\circ}$	向下: $16^{\circ} \pm 2^{\circ}$
平尾调整片 (后缘)	向下: $1^{\circ} \pm 1^{\circ}$ (最小)	
(相对于平尾弦)	$15^{\circ} \pm 1^{\circ}$ (最大)	
方向舵	向右: $25^{\circ} \pm 2^{\circ}$	向左: $25^{\circ} \pm 2^{\circ}$
方向舵调整片	向右: $30^{\circ} \pm 2^{\circ}$	向左: $30^{\circ} \pm 2^{\circ}$
Control surface deflections		
Wing Flaps	Down: $35^{\circ} \pm 2^{\circ}$	
Ailerons	Up: $30^{\circ} \pm 2^{\circ}$	Down: $17^{\circ} \pm 2^{\circ}$
Stabilator (leading edge)	Up: $6^{\circ} \pm 2^{\circ}$	Down: $16^{\circ} \pm 2^{\circ}$
Stabilator tab (trailing edge)	Down: $1^{\circ} \pm 1^{\circ}$ (min)	
(with respect to stabilator chord)	$15^{\circ} \pm 1^{\circ}$ (max)	
Rudder	Right: $25^{\circ} \pm 2^{\circ}$	Left: $25^{\circ} \pm 2^{\circ}$
Rudder tab	Right: $30^{\circ} \pm 2^{\circ}$	Left: $30^{\circ} \pm 2^{\circ}$
17. 水平基准		
横向	与座椅轨道交叉	
纵向	在 8 号和 9 号框之间, 机身左侧两个螺栓处。	
Levelling Means		
Lateral	Across seat tracks	
Longitudinal	Two screws on the fuselage left side, between frames No.8 and 9	
18. 最小飞行机组	1 个 (驾驶员)	
Minimum Flight Crew	1 (Pilot)	
19. 最多座位数	7 个, 分布如下:	
	-0.950 m (-37.4 in) 处 2 个,	
	-0.146 m (-5.7 in) 处 2 个,	

Maximum Seating Capacity	+0.867 m (+34.2 in) 处 3 个 Total 7, distributed as follows: 2 at -0.950 m (-37.4 in), 2 at -0.146 m (-5.7 in), 3 at +0.867 m (+34.2 in)
20. 行李舱/货舱	
最大允许载荷	181 kg (400 lb)
位置	+1.542 m (+60.7 in)
Baggage/Cargo Compartments	
Max Allowable Load	181 kg (400 lb)
Location	+1.542 m (+60.7 in)
21. 机轮和轮胎	见设备清单文件 doc. p/n NOR10.719-1
Wheels and Tyres	see Equipment List doc. p/n NOR10.719-1
22. 保留/ Reserved	

IV. 操作及维护说明/Operating and Service Instructions

1. 飞行手册（见注释 3.8）	直到 s/n 402 : 见文件 doc. p/n NOR10.707-1 飞机 s/n 从 412 以后: 见文件 p/n NOR10.707-1B 最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型飞机技术文件目录”
Flight Manual(see Note 3.8)	Up to s/n 402: doc. p/n NOR10.707-1 From s/n 412 onwards: doc. p/n NOR10.707-1B Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of Technical Publications” for latest applicable revision
2. 技术手册	- 飞机维修手册: 文件 doc. p/n NOR10.709-1B 和所有可用的补充材料 最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型飞机技术文件目录” - 服务通告、指南和信函 见文件 doc. p/n NOR10.777-1 “P.68 型飞机, 服务通告、服务信函和服务指南目录”
Technical Manual	- Airplane Maintenance Manual: doc. p/n NOR10.709-1B and all applicable Supplements Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of Technical Publications” for latest applicable revision - Service Bulletins, Instructions and Letters Refer to doc. p/n NOR10.777-1 “P.68 Variants, Index of

	Service Bulletins, Service Letters and Service Instructions”
3. 图解零件目录	文件 doc. p/n NOR10.711-1 和所有可用的补充材料 最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型飞机技术文件目录”
Spare Parts Catalogue (IPC)	doc. p/n NOR10.711-1 and all applicable Supplements Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of Technical Publications” for latest applicable revision
4. 电器件和主要件	见可用的 AFM 和 AMM
Instruments and aggregates	Refer to applicable AFM and AMM

V. 注释/ Notes

注释3.1: 型号设计更改的审定基础

NOTE 3.1: CERTIFICATION BASIS OF TYPE DESIGN CHANGES

对于型号设计更改No. MOD P68/14 “安装设备COM/NAV/GS/GPS GARMIN GNS 430, P/N 010-00139-01”, 除了P.68C审定基础以外, 下述适航要求的修订案适用:

1994年3月11日生效的JAR 23:

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585

For Type Design Change No. MOD P68/14 “Installation of the equipment COM/NAV/GS/GPS GARMIN GNS 430, P/N 010-00139-01”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585

对于型号设计更改No. MOD P68/17 “连接机翼油箱”, 除了P.68C审定基础以外, 下述适航要求的修订案适用:

1994年3月11日生效的JAR 23:

§§ 23.1, 23.601, 23.603, 23.605, 23.609, 23.611, 23.951, 23.953, 23.954, 23.957, 23.959, 23.963, 23.965, 23.967, 23.969, 23.971, 23.975, 23.993, 23.1501, 23.1581, 23.1585

For Type Design Change No. MOD P68/17 “Interconnected Wing Fuel Tanks”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994

§§ 23.1, 23.601, 23.603, 23.605, 23.609, 23.611, 23.951, 23.953, 23.954, 23.957, 23.959, 23.963, 23.965,

23.967, 23.969, 23.971, 23.975, 23.993, 23.1501, 23.1581, 23.1585

对于型号设计更改No. MOD P68/18 “安装Vision Microsystems VM1000、EC100、大气温度计、时钟和油位系统”，除了P.68C审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.251, 23.301, 23.303, 23.305, 23.307, 23.561, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.625, 23.955, 23.963, 23.965, 23.993, 23.1163, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1337, 23.1351, 23.1357, 23.1365, 23.1431, 23.1541, 23.1543, 23.1549, 23.1553, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 43 (依据选定的符合基础): § 23.1357

FAR 23 Amdt 45 (依据选定的符合基础): § 23.1549

FAR 23 Amdt 48 (依据选定的符合基础): § 23.611

FAR 23 Amdt 51 (依据选定的符合基础): § 23.1305

专用条件: SC P68/F01 “安装 VM 1000 (MOD P68/018)”, 参考1998年11月18日发布的doc. WG-318 “协调 FAA NPRM和JAA NPA”; AC/AMJ 20.1317

For Type Design Change No. MOD P68/18 “Vision Microsystems VM1000, EC100, Air Temperature, chronometer and Fuel Level System Installation”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994

§§ 23.1, 23.251, 23.301, 23.303, 23.305, 23.307, 23.561, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.625, 23.955, 23.963, 23.965, 23.993, 23.1163, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1337, 23.1351, 23.1357, 23.1365, 23.1431, 23.1541, 23.1543, 23.1549, 23.1553, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 43 (on elect to comply basis): § 23.1357

FAR 23 Amdt 45 (on elect to comply basis): § 23.1549

FAR 23 Amdt 48 (on elect to comply basis): § 23.611

FAR 23 Amdt 51 (on elect to comply basis): § 23.1305

Special Condition: SC P68/F01 “Installation VM 1000 (MOD P68/018)”, ref. doc. WG-318 “Harmonised FAA NPRM and JAA NPA” dated 18/11/1998; AC/AMJ 20.1317

对于型号设计更改No. MOD P68/31 “对配平安定面驱动系统进行更改”，除了P.68C审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.405, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.619, 23.623, 23.625, 23.627, 23.671, 23.677, 23.683, 23.685, 23.689

FAR 23 Amdt 48 (依据选定的符合基础): §§ 23.607, 23.611

For Type Design Change No. MOD P68/31 “Change to the Trim Stabilizer Actuating System”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994

§§ 23.405, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.619, 23.623, 23.625, 23.627, 23.671, 23.677, 23.683, 23.685, 23.689

FAR 23 Amdt 48 (on elect to comply basis): §§ 23.607, 23.611

对于型号设计更改No. MOD P68/52 “安装播云系统（航空系统E-16碘化银种子生成器）”，除了P.68C审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.21, 23.23, 23.25, 23.29, 23.31, 23.33, 23.45, 23.49, 23.51, 23.53, 23.55, 23.57, 23.59, 23.61, 23.63, 23.65, 23.66, 23.67, 23.69, 23.71, 23.73, 23.75, 23.77, 23.141, 23.143, 23.145, 23.147, 23.149, 23.151, 23.153, 23.155, 23.157, 23.161, 23.171, 23.173, 23.175, 23.177, 23.181, 23.201, 23.203, 23.207, 23.221, 23.231, 23.233, 23.235, 23.237, 23.239, 23.251, 23.253, 23.629, 23.777, 23.863, 23.867, 23.1301, 23.1309, 23.1322, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1501, 23.1505, 23.1507, 23.1511, 23.1513, 23.1519, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1559, 23.1563, 23.1581, 23.1583, 23.1585, 23.1587, 23.1589

FAR 23 Amdt 7: §§ 23.611, 23.615, 23.619, 23.625

FAR 23 Amdt 45: § 23.613, 23.621

FAR 23 Amdt 48: § 23.607

For Type Design Change No. MOD P68/52 “Cloud Seeding System Installation (Aero Systems E-16 Silver Iodide Seeding Generators)”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001

§§ 23.21, 23.23, 23.25, 23.29, 23.31, 23.33, 23.45, 23.49, 23.51, 23.53, 23.55, 23.57, 23.59, 23.61, 23.63, 23.65, 23.66, 23.67, 23.69, 23.71, 23.73, 23.75, 23.77, 23.141, 23.143, 23.145, 23.147, 23.149, 23.151, 23.153, 23.155, 23.157, 23.161, 23.171, 23.173, 23.175, 23.177, 23.181, 23.201, 23.203, 23.207, 23.221, 23.231, 23.233, 23.235, 23.237, 23.239, 23.251, 23.253, 23.629, 23.777, 23.863, 23.867, 23.1301, 23.1309, 23.1322, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1501, 23.1505, 23.1507, 23.1511, 23.1513, 23.1519, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1559, 23.1563, 23.1581, 23.1583, 23.1585, 23.1587, 23.1589

FAR 23 Amdt 7: §§ 23.611, 23.615, 23.619, 23.625

FAR 23 Amdt 45: § 23.613, 23.621

FAR 23 Amdt 48: § 23.607

对于型号设计更改No. MOD P68/86 “安装S-TEC 55X自动驾驶仪”，除了P.68C审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.29, 23.143, 23.253, 23.601, 23.603, 23.605, 23.607, 23.609, 23.685, 23.689, 23.1529, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 18:

§§ 23.1301, 23.1309, 23.1321, 23.1329, 23.1357, 23.1365, 23.1367, 23.1381, 23.1431

FAR 23 Amdt 49: § 23.1359

For Type Design Change No. MOD P68/86 “S-TEC 55X Autopilot Installation”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.29, 23.143, 23.253, 23.601, 23.603, 23.605, 23.607, 23.609, 23.685, 23.689, 23.1529, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 18:

§§ 23.1301, 23.1309, 23.1321, 23.1329, 23.1357, 23.1365, 23.1367, 23.1381, 23.1431

FAR 23 Amdt 49: § 23.1359

对于型号设计更改No. MOD P68/97 “P.68C和P.68C-TC最大零燃油重量提高” 和对于型号设计更改No. MOD P68/124 “Estensione MOD. P68/97”，除了P.68C审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23: §§ 23.1501, 23.1529, 23.1581, 23.1583, 23.1589FAR 23 Amdt 7: § 23.572

For Type Design Change No. MOD P68/97 “P.68C & P.68C-TC Maximum Zero Fuel Weight Increase” and for Type Design Change No. MOD P68/124 “Estensione MOD. P68/97”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994: §§ 23.1501, 23.1529, 23.1581, 23.1583, 23.1589

FAR 23 Amdt 7: § 23.572

对于型号设计更改No. MOD P68/123 “SAGEM 航电集成驾驶舱安装 (IFR)”，除了P.68C审定基础以外，下述适航要求的修订案和等效安全水平适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1327, 23.1331, 23.1337, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 1549, 23.1559, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323FAR 23 Amdt 17: § 23.1303专用条件:

JAR 23 Amdt 1 par. 23.1309(e) 根据JAA INT/POL/23/1 [参考2008年3月21日发布的EASA CRI F-01 第3版 “HIRF 保护”]

等效安全水平:

1994年3月11日生效的JAR 23 para. 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [参考2008年3月25日发布的 EASA CRI G-01 第8版 “Sagem 航电显示空速标记”]

For Type Design Change No. MOD P68/123 “SAGEM Avionics Integrated cockpit installation (IFR)”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements and Equivalent Level Of Safety are applicable:

JAR 23 effective 11 March 1994:

§§ 23.1, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1327, 23.1331, 23.1337, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 1549, 23.1559, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303

Special Condition:

JAR 23 Amdt 1 par. 23.1309(e) according to JAA INT/POL/23/1 [ref. EASA CRI F-01 issue 3 dated 21/03/2008 “HIRF protection”]

Equivalent Level Of Safety:

JAR 23 effective 11 March 1994 para. 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [ref. EASA CRI G-01 issue 8 dated 25/03/2008 “Sagem Avionics Display Airspeed Markings”]

对于型号设计更改No. MOD P68/126 “Garmin GNS 430W/530W (WAAS) 系统安装 ”，除了P.68C审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585, 23.1589

For Type Design Change No. MOD P68/126 “Garmin GNS 430W/530W (WAAS) system installation”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585, 23.1589

对于型号设计更改No. MOD P68/157 “P.68C飞机SAGEM玻璃驾驶舱 (IFR) 内，用Axitude AX1-200 替换Cross Bow 500GA ”，除了P.68C审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.23, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.1301, 23.1309, 23.1351, 23.1357, 23.1359, 23.1365, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585, 23.1589.

FAR 23 Amdt 57 (依据选定的符合基础): § 23.1308

For Type Design Change No. MOD P68/157 “Replacing Cross Bow 500GA with AXITUDE AX1-200 in SAGEM glass cockpit (IFR)”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.1, 23.23, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.1301, 23.1309, 23.1351, 23.1357, 23.1359, 23.1365, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585, 23.1589.

FAR 23 Amdt 57 (on elect to comply basis): § 23.1308

对于型号设计更改No. MOD P68/223 “固定式氧气系统组件安装”，除了P.68C审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.601, 23.603, 23.605, 23.625, 23.1357, 23.1367, 23.1501, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 9: § 23.1449

FAR 23 Amdt 17: § 23.1309

FAR 23 Amdt 36: § 23.561

FAR 23 Amdt 43: §§ 23.1441, 23.1443, 23.1445

FAR 23 Amdt 49: §§ 23.1447, 23.1451, 23.1453

For Type Design Change No. MOD P68/223 “Fixed oxygen system kit installation”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.601, 23.603, 23.605, 23.625, 23.1357, 23.1367, 23.1501, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 9: § 23.1449

FAR 23 Amdt 17: § 23.1309

FAR 23 Amdt 36: § 23.561

FAR 23 Amdt 43: §§ 23.1441, 23.1443, 23.1445

FAR 23 Amdt 49: §§ 23.1447, 23.1451, 23.1453

对于型号设计更改No. MOD P68/240 “Garmin G950航电安装”，除了P.68C审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.623, 23.625, 23.627, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1331, 23.1337, 23.1351, 23.1353, 23.1357, 23.1359, 23.1361, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1547, 23.1549, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303,

专用条件:

2011年8月3日发布的EASA CRI F-01 第3版 “HIRF 保护 – 集成航电系统” [JAA INT/POL/23/1 第1版]

专用条件:

2011年8月3日发布的EASA CRI B-01 第3版 “集成航电系统中的人为因素” [SC/P68 SERIE/04]

For Type Design Change No. MOD P68/240 “Garmin G950 avionics installation”, in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.623, 23.625, 23.627, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1331, 23.1337, 23.1351, 23.1353, 23.1357, 23.1359, 23.1361, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1547, 23.1549, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303,

Special Condition:

EASA CRI F-01 issue 3 dated 03/08/2011 “HIRF Protection - Integrated Avionics Systems” [JAA INT/POL/23/1 issue 1]

Special Condition:

EASA CRI B-01 issue 3 dated 03/08/2011 “Human Factors in Integrated Avionics Systems” [SC/P68 SERIE/04]

对于型号设计更改No. MOD P68/247 “Sagem 航电集成驾驶舱安装的软件更改”，除了P.68C审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.1301, 23.1309, 23.1311, 23.1545, 23.1581, 23.1583

等效安全水平:

1994年3月11日生效的JAR 23, 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [参考2010年9月29日发布的EASA CRI G-01 第5版 “Sagem 航电显示空速标记”]

For Type Design Change No. MOD P68/247 “Software change to Sagem Avionics integrated cockpit installation”,

in addition to P.68C Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.1301, 23.1309, 23.1311, 23.1545, 23.1581, 23.1583

Equivalent Level Of Safety:

JAR 23 effective 11 March 1994 par. 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [ref. EASA CRI G-01 issue 5 dated 29/09/2010 “Sagem Avionics Display Airspeed Markings”]

注释3.2: 对于第一次审查, 由适航设计标准 (见审定基础) 要求的基本设备应安装在飞机上。

此外, 还需要下列设备:

- Safe Flight Instrument Corp.失速前探测器164型, 或等效仪表
- 飞机飞行手册 (见3. IV)

NOTE 3.2: Basic equipment required by the applicable airworthiness design standard (see certification basis) shall be installed in the aircraft for the first certification.

In addition, the following equipment are required:

- Safe Flight Instrument Corp. pre-stall detector Type 164, or equivalent
- Aircraft Flight Manual (see § 3. IV)

注释3.3: 在确定空重和相关重心位置时, 必须包括下面所标出的不可用燃油和发动机未排出的润滑油:

直到s/n410

不可用燃油: 对于机翼主油箱, 在0.770m (+30.3in) 处12.9kg (28.44lb),
对于机翼副油箱, 在0.770m (+30.3in) 处5.7kg (12.57lb)
(见注释3.4和3.5a)。

未排出的润滑油: 在0.100m (+4in) 处0.454kg (1lb)。

从s/n412以后

不可用燃油 (见注释3.5b): 对于标准航程构型, 在0.770m (+30.3in) 处12.9kg (28.44lb)
对于长航程构型, 在0.770m (+30.3in) 处18.7kg (41.23lb)

未排出的润滑油: 在0.100m (+4in) 处0.454kg (1lb)。

NOTE 3.3: For the determination of the empty weight and associated centre of gravity position, unusable fuel and engine undrainable lubricant must be included as noted below:

Up to s/n 410

Unusable Fuel: 12.9 kg (28.44 lb) at +0.770 m (+30.3 in) for the main wing tanks
and 5.7 kg (12.57 lb) at +0.770 m (+30.3 in) for the auxiliary wing
tank (see Note 3.4 and 3.5a)

Undrainable Lubricant: 0.454 kg (1 lb) at +0.100 m (+4 in)

From s/n 412 onwards

Unusable Fuel (see Note 3.5b): 12.9 kg (28.44 lb) at +0.770m (+30.3in) for Standard

总不可用油量: 18 Lt (4.7 U.S.Gal)

- 长航程

总燃油量: 在+0.770 m (+30.3 in) 处, 696 Lt (184 U.S.Gal)

总不可用油量: 26 Lt (6.9 U.S.Gal)

NOTE 3.5b: For P.68C aircraft from s/n 412 onwards (embodying MOD P68/17) the following wing fuel tank configurations are approved:

- **STANDARD RANGE**

Total fuel capacity: 538 Lt (142 U.S.Gal) at +0.770 m (+30.3 in)

Total unusable fuel: 18 Lt (4.7 U.S.Gal)

- **LONG RANGE**

Total fuel capacity: 696 Lt (184 U.S.Gal) at +0.770 m (+30.3 in)

Total unusable fuel: 26 Lt (6.9 U.S.Gal)

注释3.6: P.68C飞机可以装有带有输送泵 (Kit P/N 68-034) 的翼下副油箱, 但应遵守下列限制:

- 空速

不许超越速度 V_{NE} : 175 KCAS

其它空速没有变化

- 燃油量

总燃油量为738Lt (195 U.S.Gal), 分布如下:

2个机翼主油箱 在+0.770 m (+30.3 in) 处, 269 Lt (71 U.S.Gal)/油箱

不可用: 9 Lt (2.5 U.S.Gal) /油箱

2个翼下油箱 在+0.440 m (+17.3 in) 处, 100 Lt (26 U.S.Gal) /油箱

不可用: 0 Lt /油箱

NOTE 3.6: P.68C aircraft can be equipped with under-wing auxiliary fuel tanks with transfer pumps (Kit P/N 68-034) with the following additional limitations:

- Air Speeds:

Never exceed speed V_{NE} : 175 KCAS

Other air speeds are unchanged

- Fuel Capacity:

Total fuel capacity is 738 Lt (195 U.S.Gal) distributed as follows:

2 Main Wing Tanks: 269 Lt (71 U.S.Gal) per tank at +0.770 m (+30.3 in)

Unusable: 9 Lt (2.5 U.S. gal) per tank

2 Under-Wing Tanks: 100 Lt (26 U.S.Gal) per tank at +0.440 m (+17.3 in)

Unusable: 0 Lt per tank

注释3.7: 配有Kit P/N 68/051 (根据Partenavia 服务通告No.79)的P.68C飞机, 在下述运行限制下, 最大起飞重量和最大着陆重量分别为2084 kg (4594 lb) 和1980 kg (4365 lb)被批准:

- 空速:

不许超越速度 V_{NE} : 194 KCAS

最大结构巡航速度 V_{NO} : 154 KCAS

最小设计机动速度 V_A : 132 KCAS

襟翼展态速度 V_{FE} :

15°襟翼 152 KCAS

35°襟翼 103 KCAS

最小操纵速度 (单发) V_{MC} : 60 KCAS

- 最大重量:

滑行和停驻: 2100 kg (4630 lb)

起飞: 2084 kg (4594 lb)

着陆: 1980 kg (4365 lb)

零燃油 (见注释3.14): 1890 kg (4167 lb)

- 重心范围:

后部限制: 对任何重量, 基准面后+0.481 m (+18.92 in) (31% MAC)

前部限制: 重量2100 Kg (4360 lb) 时, 基准面后+0.325 m (+12.80 in) (21% MAC)

重量小等于2084Kg (4594 lb) 时, 基准面后+0.320 m (+12.60 in) (20.6% MAC)

重量小等于1680Kg (3704 lb) 时, 基准面后+0.230 m (+9.06 in) (14.84% MAC)

对于中间重量, 重心位置值呈线性变化

对于实施了服务通告No.79的飞机, 《飞机飞行手册》必须包括被批准的补充材料N。

NOTE 3.7: P.68C aircraft equipped with the Kit P/N 68/051 (as per Partenavia Service Bulletin No.79), is approved for a Maximum Take-Off Weight and a Maximum Landing Weight respectively of 2084 kg (4594 lb) and 1980 kg (4365 lb), with the following Operating Limitations:

- Air Speeds:

Never exceed speed V_{NE} : 194 KCAS

Maximum structural cruising speed V_{NO} : 154 KCAS

Design Manoeuvring Speed V_A : 132 KCAS

Flaps Extended Speed V_{FE} :

15° Flaps 152 KCAS

35° Flaps 103 KCAS

Minimum Control Speed (Single Engine) V_{MC} : 60 KCAS

- Maximum Masses:

Taxi and Ramp: 2100 kg (4630 lb)

Take Off: 2084 kg (4594 lb)

Landing:	1980 kg (4365 lb)
Zero Fuel(see Note 3.14):	1890 kg (4167 lb)
- Centre of Gravity Range:	
Rearward Limits:	+0.481 m (+18.92 in) aft of datum (31% MAC) for any weight
Forward Limits:	+0.325 m (+12.80 in) aft of datum (21% MAC) at 2100 kg (4630 lb); +0.320 m (+12.60 in) aft of datum (20.6% MAC) at 2084 kg (4594 lb) or less +0.230 m (+9.06 in) aft of datum (14.84% MAC) at 1680 kg (3704 lb) or less with linear variation between given points.

For aircraft embodying the Service Bulletin No.79, the Aircraft Flight Manual must include the approved Supplement N

注释3.8: 下列标牌应被安装在驾驶员视野内: “本机必须按正常类飞机运行, 应遵守标牌、标记和手册中声明的运行限制。”

此外, 所有《飞机飞行手册》中要求的标牌都应安装在正确位置处。

NOTE 3.8: The following placard shall be installed in full view of pilot:

“THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS AND MANUALS”

Moreover all placards required in the Aircraft Flight Manual shall be installed in the proper location.

注释3.9: 从s/n330以后的P.68C飞机出厂时可以根据Partenavia DWG 2.2503在机身右侧配有一个机组舱门。在此情况下, 《飞机飞行手册》必须包括补充材料I (ENAC于1984年4月17日批准的No.199.649/T)。

NOTE 3.9: P.68C aircraft from s/n 330 onwards can be equipped since new with a crew door on the fuselage right side as per Partenavia DWG 2.2503. In this case, the Aircraft Flight Manual must include the Supplement I (ENAC approval No.199.649/T dated 17 April 1984).

注释3.10: 从s/n443以后的P.68C飞机出厂时可以配有调节器“MT-Propeller”(根据更改No. MOD P68/111): P-881-30 (左), P-881-31 (右)。

NOTE 3.10: P.68C aircraft from s/n 443 onwards may be equipped since new with governors “MT-Propeller” (as per Change No. MOD P68/111): P-881-30 (left), P-881-31 (right).

注释 3.11: 从 s/n412 以后的 P.68C 飞机出厂时可以配有一套“Vision Microsystems VM1000、EC100、大气温度计、时钟和油位系统”电子动力装置仪表系统, 来代替标准动力装置仪表(根据型号设计更改 No. MOD P68/18)。

NOTE 3.11: P.68C aircraft from s/n 412 onwards may be equipped since new with a “Vision Microsystems VM1000, EC100, Air Temperature, Chronometer and Fuel Level System” electronic powerplant instrumentation system, in lieu of the standard powerplant instrumentation (as per Type Design Changes No. MOD P68/18).

注释 3.12: 从 s/n443 以后的 P.68C 飞机出厂时可以配备被批准用于 IFR 运行的 SAGEM 航电集成显示系统, 该系统代替标准仪表盘布局 (根据型号设计更改 No. MOD P68/123 和 MOD P68/157)。

NOTE 3.12: P.68C aircraft from s/n 443 onwards may be equipped since new with a SAGEM Avionics Integrated Display System approved for IFR operations, in lieu of the standard instrument panel layout (as per Type Design Changes No. MOD P68/123 and MOD P68/157).

注释3.13: 从s/n443以后的P.68C飞机出厂时可以配备一套S-Tec 55X自动驾驶仪 (根据型号设计更改No. MOD P68/86)。

NOTE 3.13: P.68R aircraft from s/n 443 onwards may be equipped since new with a S-Tec 55X Autopilot (as per Type Design Change No. MOD P68/86).

注释3.14: 从s/n402以后的P.68C飞机, 最大零燃油重量(MZFW)1967kg被批准 (根据型号设计更改No. MOD P68/97和No. MOD P68/124)。

NOTE 3.14: P.68C aircraft from s/n 402 onwards are approved for a Maximum Zero Fuel Weight (MZFW) of 1967 kg (as per Type Design Changes No. MOD P68/97 and No. MOD P68/124).

注释3.15: 从s/n402以后的P.68C飞机出厂时或实施了Vulcanair服务通告No. 193可以配有固定式氧气系统组件 (根据型号设计更改No. MOD P68/223):

NOTE 3.15: P.68R aircraft from s/n 402 onwards may be equipped since new or applying Vulcanair Service Bulletin No. 193 with a fixed oxygen system kit (as per Type Design Change No. MOD P68/223).

注释3.16: 从s/n 469以后的P.68C飞机, 可以配置Garmin G950集成驾驶舱系统 (根据型号设计更改No. MOD P68/240):

NOTE 3.16: P.68C aircraft from s/n 469 onwards may be equipped with Garmin G950 Integrated Flight Deck System (as per Type Design Change No. MOD P68/240).

第 4 部分 P68 Observer 2

SECTION 4 P68 Observer 2

I.概述/General

1. 衍生型或型别/Variant or Model	P68 Observer 2
适航类别/Airworthiness Category	正常类航空器/ Normal Category aircraft
型号合格证持有人/Type Certificate Holder	VULCANAIR S.P.A. via Giovanni Pascoli, 7 80026 - Casoria (Napoli) Italy.
制造商/Manufacture	VULCANAIR S.P.A. via Giovanni Pascoli, 7 80026 - Casoria (Napoli) Italy.
2. 申请审查日期/ Certification Application Date	1988.05.03/ 3 May 1988
3. 当局型号审查日期	1989.11.30 (RAI TC No. A151; 1998 年 11 月 25 日重新发布 ENAC TC No. A 365)
National Authority Type Certificate Date	30 November 1989 (RAI TC No. A 151; reissued as ENAC TC No. A 365 dated 25 November 1998)

II.审定基础/Certification Basis

1. 确定可使用的要求的参考日期 Reference Date for determining the applicable requirements	1988.05.03 3 May 1988
2. 适航要求 (见注释 4.1)	FAR 23 部 (1965 年 2 月 1 日生效), 包括第 23-1 至第 23-6 修正案, 和 <u>FAR 23 修正案 14</u> : §23.507, 23.509 <u>FAR 23 修正案 17</u> : §23.1322 <u>FAR 23 修正案 20</u> : § 23.1401 <u>FAR 23 修正案 31</u> : § 23.629
Airworthiness Requirements (see Note 4.1)	FAR 23 effective 1 February 1965 including Amdt 1 through 6 plus <u>FAR 23 Amdt 14</u> : § 23.507, 23.509

	<u>FAR 23 Amdt 17: §23.1322</u>
	<u>FAR 23 Amdt 20: § 23.1401</u>
	<u>FAR 23 Amdt 31: § 23.629</u>
3. EASA 专用条件/ Special Conditions	无/ None
4. EASA 豁免/ Exemptions	无/ None
5. EASA 偏离/ Deviations	无/ None
6. EASA 等效安全/ Equivalent Safety Findings	无/ None
7. 所选的符合性要求	无
Requirements elected to comply	None
8. EASA 环境标准	噪声: ICAO 附件 16, 第 1 卷, 第 10 章
	燃油和发动机排放: 不适用
Environmental Standards	Noise: ICAO Annex 16, Volume I, Chapter 10
	Fuel venting & engine emission: N/A

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

1. 型号设计定义	文件 SPEC VA/129/PRD “型号设计构型数据 P.68 Observer 2”
Type Design Definition	doc. SPEC VA/129/PRD “Type Design Configuration Data P.68 Observer 2”
2. 描述	双发（活塞），高单翼，固定式前三点起落架
Description	Twin engine (piston), high wing monoplane with fixed tricycle landing gear
3. 设备	参见《飞机飞行手册》中“设备清单”： 直到 s/n 410 的飞机见 doc.p/n NOR10.707-8，或 从 s/n411 以后的飞机见 doc. p/n NOR10.707-8B （见注释 4.2）
Equipment	Refer to Equipment List of “Aircraft Flight Manual” doc. p/n NOR10.707-8 (up to s/n 410), or doc. p/n NOR10.707 -8B (from s/n 411 onwards) （see Note4.2）
4. 尺寸	s/n 直到 410 的飞机： 长： 9.54 m (31.30 ft) 高： 3.40 m (11.15 ft) 宽（翼展）： 12.00 m (39.37 ft)

Dimensions	从 s/n411 以后的飞机:	
	长:	9.15 m (30.02 ft)
	高:	3.40 m (11.15 ft)
	宽 (翼展):	12.00 m (39.37 ft)
	Up to s/n 410:	
	Length:	9.54 m (31.3 ft)
	Height:	3.40 m (11.15 ft)
	Width (Wing Span):	12.00 m (39.37 ft)
	From s/n 411:	
	Length:	9.15m (30.02 ft)
5. 发动机/Engine	2 台 Lycoming IO-360-A1B6	
	2 Lycoming IO-360-A1B6	
	5.1 型号	
	Model	
	5.2 型号合格证	
	Type Certificate	
	FAA 型号合格证 No. 1E10	
	FAA Type Certificate No. 1E10	
	中国民航认可证: VTC045E	
	CAAC Validation Type Certificate: VTC045E	
5.3 限制	在 2700 rpm 时 200 HP	
	其它发动机限制见《飞机飞行手册》“运行限制”部分	
	200 HP at 2700 rpm	
	Limitations	
	Other engine's limitations are listed in the "Aircraft Flight Manual", Operating Limitations Section	
	见《飞机飞行手册》	
	6. 载荷因子	
	Load factors	
	7. 螺旋桨 /Propeller	
	7.1 型号	
Model	2 个 Hartzell HC-C2YK-2C()F/FC7666A-4	
	调速器: 2 个 Woodward model ()210655, 或可选	
	2 个 Woodward model ()210844	
	(见注释 4.6)	
	桨毂盖: 2 个 Hartzell model 836-29	
	2 Hartzell HC-C2YK-2C()F/FC7666A-4	
	Governors: 2 Woodward model ()210655, or alternatively	
	2 Woodward model ()210844	

	(see Note 4.6)
	Spinners: 2 Hartzell model 836-29
7.2 型号合格证	FAA 型号合格证 No. P-920
Type Certificate	FAA Type Certificate No. P-920
	中国民航认可证: VTC0156P
	CAAC Validation Type Certificate: VTC0156P
7.3 桨叶数/ Number of blades:	3
7.4 直径	1.829 m (72 in) - 不允许再减小
Diameter	1.829 m (72 in) - No reduction permitted
7.5 转向	顺时针
Sense of Rotation	Clockwise
7.6 螺旋桨限制	在站位 0.762 m (30 in)处, 桨距设置为
	最大 $+81.2^{\circ} \pm 0.3^{\circ}$
	最小 $+14.2^{\circ} \pm 0.2^{\circ}$
Propeller limits	Pitch setting at station 0.762 m (30 in):
	Max $+81.2^{\circ} \pm 0.3^{\circ}$
	Min $+14.2^{\circ} \pm 0.2^{\circ}$
8. 液体 /Fluids	
8.1 燃油	100 或 100LL 级航空汽油, 根据 Textron Lycoming
	公司服务指南 1070 最新版规定。
Fuel	Aviation Gasoline, grade 100 or 100LL, in accordance with
	latest issue of Textron Lycoming Service Instruction 1070
8.2 滑油	单粘度或多粘度滑油, 根据 Textron Lycoming 公司服
	务指南 1014 最新版规定。
Oil	Single or multi-viscosity oils, in accordance with latest
	issue of Textron Lycoming Service Instruction 1014
8.3 冷却剂/ Coolant:	空气/ Air
9. 液体容量 (见注释 4.3) / Fluid capacities (see Note 4.3)	
9.1 燃油	总共: 在+0.77m (+30.3 in) 处, 538 升 (142 U.S.Gal)
(见注释 4.4)	[269 升 (71 U.S.Gal) /机翼油箱]
	不可用: 9 升 (2.5 U.S.Gal) /机翼油箱
Fuel	Total: 538 Lt (142 U.S.Gal)
(see Note 4.4)	[269 Lt (71 U.S.Gal) per wing tank]
	at +0.770 m (+30.3 in)
	Unusable: 9 Lt (2.5 U.S.Gal) per wing tank
9.2 润滑油	总共: 在+0.100m (+4 in) 处, 15 升 (16 U.S.qt)

	[7.5 升(8 U.S.qt)/发动机]
	不可用: 1.8 升 (1.9U.S. qt)
Oil	Total: 15 Lt (16 U.S.qt)
	[7.5 Lt (8 U.S.qt) per engine] at +0.100 m (+4 in)
	Unusable: 1.8 Lt (1.9 U.S.qt)
9.3 冷却系统容量/ Coolant system capacity	不适用/ N/A
10. 空速	
不许超越速度 V_{NE} :	194 KCAS
最大结构巡航速度 V_{NO} :	154 KCAS
最小设计机动速度 V_A :	132 KCAS
襟翼展态速度 V_{FE} :	
襟翼 15°:	152 KCAS
襟翼 35°:	103 KCAS
最小操纵速度 (单发) V_{MC} :	58 KCAS
Air Speeds	
Never exceed speed V_{NE} :	194 KCAS
Max structural cruising speed V_{NO} :	154 KCAS
Design Manoeuvring Speed V_A :	132 KCAS
Flap Extended Speed V_{FE} :	
Flaps 15°:	152 KCAS
Flaps 35°:	103 KCAS
Minimum Control Speed (Single Engine) V_{MC} :	58 KCAS
11. 最大运行高度/ Maximum Operating Altitude	不适用/N/A
12. 全天候运行能力	日/夜 – VFR、IFR, 取决于所安装的设备 禁止在结冰条件下飞行
Allweather Operations Capability	Day/Night-VFR, IFR, depending on installed equipment. Flight in icing conditions is prohibited
13. 最大重量	
滑行和停驻	2100 公斤 (4630 磅)
起飞	2084 公斤 (4594 磅)
着陆	1980 公斤 (4365 磅)
最大零燃油重量	1890 公斤 (4167 磅)
Maximum Weights	
Taxi and Ramp:	2100 kg (4630 lb)
Take-Off:	2084 kg (4594 lb)
Landing:	1980 kg (4365 lb)

Maximum Zero Fuel Weight:	1890 kg (4167 lb)
14. 重心范围	
后部限制	任一重量下, 基准面后+0.481 m (+18.92 in) (31% MAC)
前部限制	重量 2100 kg (4630 lb)时, 基准面后+0.351 m (+13.81 in) (22.65% MAC)
	重量 2084 kg (4594 lb)时, 基准面后+0.348 m (+13.71 in) (22.45% MAC)
	重量小等于 1600 kg (3527lb)时, 基准面后+0.260 m (+10.25 in) (16.8% MAC)
	对于中间重量, 重心位置值呈线性变化
Rearward Limits:	+0.481 m (+18.92 in) aft of datum (31% MAC) for any weight
Forward Limits	+0.351m (+13.81 in) aft of datum (22.65% MAC) at 2100 kg (4630 lb)
	+0.348m (+13.71 in) aft of datum (22.45% MAC) at 2084 kg (4594 lb)
	+0.260 m (+10.25 in) aft of datum (16.8% MAC) at 1600 kg (3527 lb) or less
	with linear variation for intermediate weights
15. 基准面	与机翼前缘相切
Datum	Tangent to the wing leading edge
16. 控制面偏转	
襟翼	向下: $35^{\circ} \pm 2^{\circ}$
副翼	向上: $30^{\circ} \pm 2^{\circ}$ 向下: $17^{\circ} \pm 2^{\circ}$
平尾 (前缘)	向上: $6^{\circ} \pm 2^{\circ}$ 向下: $16^{\circ} \pm 2^{\circ}$
平尾调整片 (后缘)	向下: $1^{\circ} \pm 1^{\circ}$ (最小)
(相对于平尾弦)	$15^{\circ} \pm 1^{\circ}$ (最大)
方向舵	向右: $25^{\circ} \pm 2^{\circ}$ 向左: $25^{\circ} \pm 2^{\circ}$
方向舵调整片	向右: $30^{\circ} \pm 2^{\circ}$ 向左: $30^{\circ} \pm 2^{\circ}$
Control surface deflections	
Wing Flaps	Down: $35^{\circ} \pm 2^{\circ}$
Ailerons	Up: $30^{\circ} \pm 2^{\circ}$ Down: $17^{\circ} \pm 2^{\circ}$
Stabilator (leading edge)	Up: $6^{\circ} \pm 2^{\circ}$ Down: $16^{\circ} \pm 2^{\circ}$
Stabilator tab (trailing edge)	Down: $1^{\circ} \pm 1^{\circ}$ (min)
(with respect to stabilator chord)	$15^{\circ} \pm 1^{\circ}$ (max)
Rudder	Right: $25^{\circ} \pm 2^{\circ}$ Left: $25^{\circ} \pm 2^{\circ}$

Rudder tab	Right: 30° ± 2° Left: 30° ± 2°
17. 水平基准	
横向	与座椅轨道交叉
纵向	在 8 号和 9 号框之间，机身左侧两个螺栓处。
Levelling Means	
Lateral	Across seat tracks
Longitudinal	Two screws on the fuselage left side, between frames No.8 and 9
18. 最小飞行机组	1 个（驾驶员）
Minimum Flight Crew	1 (Pilot)
19. 最多座位数	共 6 个，分布如下：
	-0.950 m (-37.4 in) 处 2 个，
	-0.146 m (-5.7 in) 处 2 个，
	+0.867 m (+34.2 in) 处 2 个
Maximum Seating Capacity	Total 6, distributed as follows:
	2 at -0.950 m (-37.4 in),
	2 at -0.146 m (-5.7 in),
	2 at +0.867 m (+34.2 in)
20. 行李舱/货舱	
最大允许载荷	181 kg (400 lb)
位置	+1.542 m (+60.7 in)
Baggage/Cargo Compartments	
Max Allowable Load	181 kg (400 lb)
Location	+1.542 m (+60.7 in)
21. 机轮和轮胎	见《飞机飞行手册》
Wheels and Tyres	see Aircraft Flight Manual
22. 保留/ Reserved	不适用/N/A

IV. 操作及维护说明/Operating and Service Instructions

1. 飞行手册	直到 s/n410 的飞机：文件 doc. p/n NOR10.707-8
（见注释 4.5）	s/n 411 以后的飞机：文件 doc. p/n NOR10.707-8B
	最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型飞机技术文件目录”
Flight Manual	Aircraft up to s/n 410: doc. p/n NOR10.707-8
（see Notes 4.5）	Aircraft from s/n 411: doc. p/n NOR10.707-8B
	Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of Technical Publications” for latest applicable revision

2. 技术手册

- 飞机维修手册:

文件 doc. p/n NOR10.709-10 和所有可用的补充材料
最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型
飞机技术文件目录”

- 服务通告、指南和信函

见文件 doc. p/n NOR10.777-1 “P.68 型飞机 服务通
告、 服务信函和服务指南目录”

Technical Manual

- Airplane Maintenance Manual:

doc. p/n NOR10.709-10 and all applicable Supplements
Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of
Technical Publications” for latest applicable revision

- Service Bulletins, Instructions and Letters

Refer to doc. p/n NOR10.777-1 “P.68 Variants, Index
of Service Bulletins, Service Letters and Service
Instructions”

3. 图解零件目录

文件 doc. p/n NOR10.711-11A

最新可应用版本见文件 doc. p/n NOR 10.763-1 “P.68 型
飞机技术文件目录”

Spare Parts Catalogue (IPC)

doc. p/n NOR10.711-11A

Refer to doc. p/n NOR 10.763-1 “P.68 Variants Index of
Technical Publications” for latest applicable revision

4. 电器件和主要件

见可用的 AFM 和 AMM

Instruments and aggregates

Refer to applicable AFM and AMM

V. 注释/ Notes

注释4.1: 型号设计更改的审定基础

NOTE 4.1: CERTIFICATION BASIS OF TYPE DESIGN CHANGES

对于型号设计更改No. MOD P68/14 “安装设备COM/NAV/GS/GPS GARMIN GNS 430, P/N
010-00139-01”, 除了P.68 Observer 2审定基础以外, 下述适航要求的修订案适用:

1994年3月11日生效的JAR 23:

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357,
23.1365, 23.1431, 23.1581, 23.1583, 23.1585

For Type Design Change No. MOD P68/14 “Installation of the equipment COM/NAV/GS/GPS GARMIN GNS
430, P/N 010-00139-01”, in addition to P.68 Observer 2 Certification Basis, the following amendments of
airworthiness requirements are applicable:

JAR 23 effective 11 March 1994

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585

对于型号设计更改No. MOD P68/17 “连接机翼油箱”，除了P.68 Observer 2审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.601, 23.603, 23.605, 23.609, 23.611, 23.951, 23.953, 23.954, 23.957, 23.959, 23.963, 23.965, 23.967, 23.969, 23.971, 23.975, 23.993, 23.1501, 23.1581, 23.1585

For Type Design Change No. MOD P68/17 “Interconnected Wing Fuel Tanks”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994

§§ 23.1, 23.601, 23.603, 23.605, 23.609, 23.611, 23.951, 23.953, 23.954, 23.957, 23.959, 23.963, 23.965, 23.967, 23.969, 23.971, 23.975, 23.993, 23.1501, 23.1581, 23.1585

对于型号设计更改No. MOD P68/18 “安装Vision Microsystems VM1000、EC100、大气温度计、时钟和油位系统”，除了P.68 Observer 2审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.251, 23.301, 23.303, 23.305, 23.307, 23.561, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.625, 23.955, 23.963, 23.965, 23.993, 23.1163, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1337, 23.1351, 23.1357, 23.1365, 23.1431, 23.1541, 23.1543, 23.1549, 23.1553, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 43 (依据选定的符合基础): § 23.1357

FAR 23 Amdt 45 (依据选定的符合基础): § 23.1549

FAR 23 Amdt 48 (依据选定的符合基础): § 23.611

FAR 23 Amdt 51 (依据选定的符合基础): § 23.1305

专用条件: SC P68/F01 “安装 VM 1000 (MOD P68/018)”, 参考1998年11月18日发布的doc. WG-318 “协调 FAA NPRM和JAA NPA”; AC/AMJ 20.1317

For Type Design Change No. MOD P68/18 “Vision Microsystems VM1000, EC100, Air Temperature, chronometer and Fuel Level System Installation”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994

§§ 23.1, 23.251, 23.301, 23.303, 23.305, 23.307, 23.561, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.625, 23.955, 23.963, 23.965, 23.993, 23.1163, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1337, 23.1351, 23.1357, 23.1365, 23.1431, 23.1541, 23.1543, 23.1549, 23.1553, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 43 (on elect to comply basis): § 23.1357

FAR 23 Amdt 45 (on elect to comply basis): § 23.1549

FAR 23 Amdt 48 (on elect to comply basis): § 23.611

FAR 23 Amdt 51 (on elect to comply basis): § 23.1305

Special Condition: SC P68/F01 “Installation VM 1000 (MOD P68/018)”, ref. doc. WG-318 “Harmonised FAA NPRM and JAA NPA” dated 18/11/1998; AC/AMJ 20.1317

对于型号设计更改No. MOD P68/31 “对配平安定面驱动系统进行更改”，除了P.68 Observer 2审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.405, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.619, 23.623, 23.625, 23.627, 23.671, 23.677, 23.683, 23.685, 23.689

FAR 23 Amdt 48（依据选定的符合基础）：§§ 23.607, 23.611

For Type Design Change No. MOD P68/31 “Change to the Trim Stabilizer Actuating System”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994

§§ 23.405, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.619, 23.623, 23.625, 23.627, 23.671, 23.677, 23.683, 23.685, 23.689

FAR 23 Amdt 48 (on elect to comply basis): §§ 23.607, 23.611

对于型号设计更改No. MOD P68/52 “安装播云系统（航空系统E-16碘化银种子生成器）”，除了P.68 Observer 2审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.21, 23.23, 23.25, 23.29, 23.31, 23.33, 23.45, 23.49, 23.51, 23.53, 23.55, 23.57, 23.59, 23.61, 23.63, 23.65, 23.66, 23.67, 23.69, 23.71, 23.73, 23.75, 23.77, 23.141, 23.143, 23.145, 23.147, 23.149, 23.151, 23.153, 23.155, 23.157, 23.161, 23.171, 23.173, 23.175, 23.177, 23.181, 23.201, 23.203, 23.207, 23.221, 23.231, 23.233, 23.235, 23.237, 23.239, 23.251, 23.253, 23.629, 23.777, 23.863, 23.867, 23.1301, 23.1309, 23.1322, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1501, 23.1505, 23.1507, 23.1511, 23.1513, 23.1519, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1559, 23.1563, 23.1581, 23.1583, 23.1585, 23.1587, 23.1589

FAR 23 Amdt 7: §§ 23.611, 23.615, 23.619, 23.625

FAR 23 Amdt 45: § 23.613, 23.621

FAR 23 Amdt 48: § 23.607

For Type Design Change No. MOD P68/52 “Cloud Seeding System Installation (Aero Systems E-16 Silver Iodide Seeding Generators)”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001

§§ 23.21, 23.23, 23.25, 23.29, 23.31, 23.33, 23.45, 23.49, 23.51, 23.53, 23.55, 23.57, 23.59, 23.61, 23.63, 23.65, 23.66, 23.67, 23.69, 23.71, 23.73, 23.75, 23.77, 23.141, 23.143, 23.145, 23.147, 23.149, 23.151, 23.153, 23.155, 23.157, 23.161, 23.171, 23.173, 23.175, 23.177, 23.181, 23.201, 23.203, 23.207, 23.221, 23.231, 23.233, 23.235, 23.237, 23.239, 23.251, 23.253, 23.629, 23.777, 23.863, 23.867, 23.1301, 23.1309, 23.1322, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1501, 23.1505, 23.1507, 23.1511, 23.1513, 23.1519, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1559, 23.1563, 23.1581, 23.1583, 23.1585, 23.1587, 23.1589

FAR 23 Amdt 7: §§ 23.611, 23.615, 23.619, 23.625

FAR 23 Amdt 45: § 23.613, 23.621

FAR 23 Amdt 48: § 23.607

对于型号设计更改No. MOD P68/86 “安装S-TEC 55X自动驾驶仪”，除了P.68 Observer 2审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.29, 23.143, 23.253, 23.601, 23.603, 23.605, 23.607, 23.609, 23.685, 23.689, 23.1529, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 18:

§§ 23.1301, 23.1309, 23.1321, 23.1329, 23.1357, 23.1365, 23.1367, 23.1381, 23.1431

FAR 23 Amdt 49: § 23.1359

For Type Design Change No. MOD P68/86 “S-TEC 55X Autopilot Installation”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.29, 23.143, 23.253, 23.601, 23.603, 23.605, 23.607, 23.609, 23.685, 23.689, 23.1529, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 18:

§§ 23.1301, 23.1309, 23.1321, 23.1329, 23.1357, 23.1365, 23.1367, 23.1381, 23.1431

FAR 23 Amdt 49: § 23.1359

对于型号设计更改No. MOD P68/123 “SAGEM 航电集成驾驶舱安装 (IFR)”，除了P.68 Observer 2审定基础以外，下述适航要求的修订案和等效安全水平适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1327, 23.1331, 23.1337, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 1549, 23.1559, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303

专用条件:

JAR 23 Amdt 1 par. 23.1309(e) 根据JAA INT/POL/23/1 [参考2008年3月21日发布的EASA CRI F-01 第3版“HIRF 保护”]

等效安全水平:

1994年3月11日生效的JAR 23 para. 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [参考2008年3月25日发布的EASA CRI G-01 第8版“Sagem 航电显示空速标记”]

For Type Design Change No. MOD P68/123 “SAGEM Avionics Integrated cockpit installation (IFR)”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements and Equivalent Level Of Safety are applicable:

JAR 23 effective 11 March 1994:

§§ 23.1, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1327, 23.1331, 23.1337, 23.1351, 23.1357, 23.1359, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 1549, 23.1559, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323FAR 23 Amdt 17: § 23.1303Special Condition:

JAR 23 Amdt 1 par. 23.1309(e) according to JAA INT/POL/23/1 [ref. EASA CRI F-01 issue 3 dated 21/03/2008 “HIRF protection”]

Equivalent Level Of Safety:

JAR 23 effective 11 March 1994 para. 23.1545(b)(1), 23.1545(b)(5), 23.1545(b)(6) [ref. EASA CRI G-01 issue 8 dated 25/03/2008 “Sagem Avionics Display Airspeed Markings”]

对于型号设计更改No. MOD P68/126“Garmin GNS 430W/530W (WAAS)系统安装”，除了P.68 Observer 2审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585, 23.1589

For Type Design Change No. MOD P68/126 “Garmin GNS 430W/530W (WAAS) system installation”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.1, 23.601, 23.603, 23.605, 23.611, 23.1301, 23.1309, 23.1311, 23.1321, 23.1327, 23.1351, 23.1357, 23.1365, 23.1431, 23.1581, 23.1583, 23.1585, 23.1589

对于型号设计更改No. MOD P68/157“在SAGEM玻璃驾驶舱(IFR)内，用AXITUDE AX1-200替换Cross

Bow 500GA”，除了P.68 Observer 2审定基础以外，下述适航要求的修订案适用：

1994年3月11日生效的JAR 23:

§§ 23.1, 23.23, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.1301, 23.1309, 23.1351, 23.1357, 23.1359, 23.1365, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585, 23.1589.

FAR 23 Amdt 57（依据选定的符合基础）: § 23.1308

For Type Design Change No. MOD P68/157 “Replacing Cross Bow 500GA with AXITUDE AX1-200 in SAGEM glass cockpit (IFR)”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 effective 11 March 1994:

§§ 23.1, 23.23, 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.1301, 23.1309, 23.1351, 23.1357, 23.1359, 23.1365, 23.1431, 23.1501, 23.1525, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585, 23.1589.

FAR 23 Amdt 57 (on elect to comply basis): § 23.1308

对于型号设计更改No. MOD P68/223 “固定式氧气系统组件安装”，除了P.68TC Observer审定基础以外，下述适航要求的修订案适用：

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.601, 23.603, 23.605, 23.625, 23.1357, 23.1367, 23.1501, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 9: § 23.1449

FAR 23 Amdt 17: § 23.1309

FAR 23 Amdt 36: § 23.561

FAR 23 Amdt 43: §§ 23.1441, 23.1443, 23.1445

FAR 23 Amdt 49: §§ 23.1447, 23.1451, 23.1453

For Type Design Change No. MOD P68/223 “Fixed oxygen system kit installation”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.601, 23.603, 23.605, 23.625, 23.1357, 23.1367, 23.1501, 23.1529, 23.1541, 23.1581, 23.1583, 23.1585

FAR 23 Amdt 9: § 23.1449

FAR 23 Amdt 17: § 23.1309

FAR 23 Amdt 36: § 23.561

FAR 23 Amdt 43: §§ 23.1441, 23.1443, 23.1445

FAR 23 Amdt 49: §§ 23.1447, 23.1451, 23.1453

对于型号设计更改No. MOD P68/240 “Garmin G950航电安装”，除了P.68 Observer 2审定基础以外，

下述适航要求的修订案适用:

2001年2月1日生效的JAR 23 Amdt 1:

§§ 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.623, 23.625, 23.627, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1331, 23.1337, 23.1351, 23.1353, 23.1357, 23.1359, 23.1361, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1547, 23.1549, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303,

专用条件:

2011年8月3日发布的EASA CRI F-01 第3版 “HIRF 保护 – 集成航电系统” [JAA INT/POL/23/1 第1版]

专用条件:

2011年8月3日发布的EASA CRI B-01 第3版 “集成航电系统中的人为因素” [SC/P68 SERIE/04]

For Type Design Change No. MOD P68/240 “Garmin G950 avionics installation”, in addition to P.68 Observer 2 Certification Basis, the following amendments of airworthiness requirements are applicable:

JAR 23 Amdt 1 effective 01 February 2001:

§§ 23.25, 23.29, 23.601, 23.603, 23.605, 23.607, 23.609, 23.611, 23.613, 23.623, 23.625, 23.627, 23.771, 23.773, 23.777, 23.1301, 23.1305, 23.1309, 23.1311, 23.1321, 23.1322, 23.1327, 23.1331, 23.1337, 23.1351, 23.1353, 23.1357, 23.1359, 23.1361, 23.1365, 23.1367, 23.1381, 23.1431, 23.1501, 23.1523, 23.1525, 23.1529, 23.1541, 23.1543, 23.1545, 23.1547, 23.1549, 23.1581, 23.1583, 23.1585, 23.1589

FAR 23 Amdt 7: § 23.1323

FAR 23 Amdt 17: § 23.1303,

Special Condition:

EASA CRI F-01 issue 3 dated 03/08/2011 “HIRF Protection - Integrated Avionics Systems” [JAA INT/POL/23/1 issue 1]

Special Condition:

EASA CRI B-01 issue 3 dated 03/08/2011 “Human Factors in Integrated Avionics Systems” [SC/P68 SERIE/04]

注释4.2: 对于第一次审查, 由适航设计标准 (见审定基础) 要求的基本设备应安装在飞机上。

此外, 还需要下列设备:

- Safe Flight Instrument Corp.失速前探测器164型, 或等效仪表
- 飞机飞行手册 (见4. IV)

NOTE 4.2: Basic equipment required by the applicable airworthiness design standard (see certification basis) shall be installed in the aircraft for the first certification.

In addition, the following equipment are required:

- Safe Flight Instrument Corp. pre-stall detector Type 164, or equivalent

- Aircraft Flight Manual (see § 4.IV)

注释4.3: 在确定空重和相关重心位置时, 必须包括下面所标出的不可用燃油和发动机未排出的润滑油:

直到s/n 410

不可用燃油: 对于机翼主油箱, 在0.770m (+30.3in) 处12.9kg (28.44lb),
对于机翼副油箱, 在0.770m (+30.3in) 处5.7kg (12.57lb)
(见注释4.4a)。

未排出的润滑油: 在0.100m (+4in) 处0.454kg (1lb)。

从s/n 411以后

不可用燃油 (见注释4.4b): 对于标准航程构型, 在0.770m (+30.3in) 处12.9kg (28.44lb),
对于长航程构型, 在0.770m (+30.3in) 处18.7kg (41.23lb)

未排出的润滑油: 在0.100m (+4in) 处0.454kg (1lb)。

NOTE 4.3: For the determination of the empty weight and associated centre of gravity position, unusable fuel and engine undrainable lubricant must be included as noted below:

Up to s/n 410

Unusable Fuel: 12.9 kg (28.44 lb) at +0.770 m (+30.3 in) for the main
wing tanks and 5.7 kg (12.57 lb) at +0.770 m (+30.3 in)
for the auxiliary wing tank (see Note 4.4a)
Undrainable Lubricant: 0.454 kg (1 lb) at +0.100 m (+4 in)

From s/n 411 onwards

Unusable Fuel: (see Note 4.4b) 12.9 kg (28.44 lb) at +0.770 m (+30.3 in) for Standard
Range Configuration
18.7 Kg (41.23 lbs) at +0.770 m (+30.3 in) for Long
Range Configuration
Undrainable Lubricant: 0.454 kg (1 lb) at +0.100 m (+4 in)

注释4.4: 燃油量

4.4a): 直到s/n410的P.68 Observer 2飞机可以装有两个带有输送泵 (Kit P/N 68-050) 的副油箱。在这种构型下的飞机, 全部油量为696Lt (184 U.S.Gal), 分布如下:

- 2个机翼主油箱 在+0.770 m (+30.3 in) 处, 269 Lt (71 U.S.Gal)/油箱
不可用: 4 Lt (1 U.S.Gal) /油箱
- 2个机翼副油箱 在+0.770 m (+30.3 in) 处, 79 Lt (21 U.S.Gal) /油箱
不可用: 4 Lt (1 U.S.Gal) /油箱

4.4a) P.68 Observer 2 aircraft up to s/n 410 can be equipped with two auxiliary fuel tanks with transfer pumps (Kit P/N 68-050). For aircraft in this configuration, the total fuel capacity is 696 Lt (184 U.S.Gal) distributed as follows:

- 2 Main Wing Tanks 269 Lt (71 U.S.Gal) per tank at +0.770 m (+30.3 in)
Unusable: 4 Lt (1 U.S.Gal) per tank
- 2 Auxiliary Wing Tanks 79 Lt (21 U.S.Gal) per tank at +0.770 m (+30.3 in)
Unusable: 4 Lt (1 U.S.Gal) per tank.

注释**4.4b**: 从s/n 411以后的P.68 Observer 2飞机（实施了MOD P68/17），两个机翼油箱构型被批准：

- 标准航程

- 总燃油量： 在+0.770 m (+30.3 in) 处， 538 Lt (142 U.S.Gal)
- 总不可用油量： 18 Lt (4.7 U.S.Gal)

- 长航程

- 总燃油量： 在+0.770 m (+30.3 in) 处， 696 Lt (184 U.S.Gal)
- 总不可用油量： 26 Lt (6.9 U.S.Gal)

4.4b) For P.68 Observer 2 aircraft from s/n 411 onwards (embodying MOD P68/17), two wing tank configurations are approved:

- **STANDARD RANGE**

- Total fuel capacity: 538 Lt (142 U.S.Gal) at +0.770 m (+30.3 in)
- Total unusable fuel: 18 Lt (4.7 U.S.Gal)

- **LONG RANGE**

- Total fuel capacity: 696 Lt (184 U.S.Gal) at +0.770 m (+30.3 in)
- Total unusable fuel: 26 Lt (6.9 U.S.Gal)

注释**4.5**: 下列标牌应被安装在驾驶员视野内：“本机必须按正常类飞机运行，应遵守标牌、标记和手册中声明的运行限制。”

此外，所有《飞机飞行手册》中要求的标牌都应安装在正确位置处。

NOTE 4.5: Following placard shall be installed in full view of pilot:

“THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS AND MANUALS”

Moreover all placards required in the Aircraft Flight Manual shall be installed in the proper location.

注释**4.6**: 从s/n446以后的P.68 Observer 2飞机，包括s/n423，出厂时可以配备调节器“MT-Propeller”（根据更改No. MOD P68/111）：P-881-30（左），P-881-31（右）。

NOTE 4.6: P.68 Observer 2 aircraft from s/n 446 onwards, including s/n 423, may be equipped since new with governors “MT-Propeller” (as per Change No. MOD P68/111): P-881-30 (left), P-881-31 (right).

注释 **4.7**: 从 s/n411 以后的 P.68 Observer 2 飞机出厂时可以配有一套“Vision Microsystems VM1000、EC100、

大气温度计、时钟和油位系统”电子动力装置仪表系统，来代替标准动力装置仪表（根据型号设计更改 No. MOD P68/18）。

NOTE 4.7: P.68 Observer 2 aircraft from s/n 411 onwards may be equipped since new with a “Vision Microsystems VM1000, EC100, Air Temperature, Chronometer and Fuel Level System” electronic powerplant instrumentation system, in lieu of the standard powerplant instrumentation (as per Type Design Changes No. MOD P68/18).

注释 4.8: 从 s/n446 以后的 P.68 Observer 2 飞机，包括 s/n423，出厂时可以配有被批准用于 IFR 运行的 SAGEM 航电集成显示系统，该系统代替标准仪表盘布局（根据型号设计更改 No. MOD P68/123 和 MOD P68/157）。

NOTE 4.8: P.68 Observer 2 aircraft from s/n 446 onwards, including s/n 423, may be equipped since new with SAGEM Avionics Integrated Display System approved for IFR operations, in lieu of the standard instrument panel layout (as per Type Design Changes No. MOD P68/123 and MOD P68/157).

注释 4.9: 从 s/n446 以后的 P.68 Observer 2 飞机，包括 s/n423，出厂时可以配有一套 S-Tec 55X 自动驾驶仪（根据型号设计更改 No. MOD P68/86）。

NOTE 4.9: P.68 Observer 2 aircraft from s/n 446 onwards, including s/n 423, may be equipped since new with a S-Tec 55X Autopilot (as per Type Design Change No. MOD P68/86).

注释 4.10: 从 s/n401 以后的 P.68 Observer 2 飞机出厂时或实施了 Vulcanair 服务通告 No. 193 可以配置固定式氧气系统组件（根据型号设计更改 No. MOD P68/223）：

NOTE 4.10: P.68 Observer 2 aircraft from s/n 401 onwards may be equipped since new or applying Vulcanair Service Bulletin No.193 with a fixed oxygen system kit (as per Type Design Change No. MOD P68/223).

注释 4.11: 从 s/n 465 以后的 P.68 Observer 2 飞机，出厂时可以配置 Garmin G950 集成驾驶舱系统（根据型号设计更改 No. MOD P68/240）：

NOTE 4.11: P.68 Observer 2 aircraft from s/n 465 onwards may be equipped since new with Garmin G950 Integrated Flight Deck System (as per Type Design Change No. MOD P68/240).