

型号合格证数据单
TYPE CERTIFICATE DATA SHEET

编号/No: TC0017A

版次/Revision: 6

型别/Model:

Z11(AC301)

Z11MB1(AC301A)

Z11M-100(AC311)

AC311A

批准人/Approved By:

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职务/Title: 司长

日期/date: 2024-09-19

本数据单是型号合格证（编号：TC0017A）的组成部分，它规定了获得该型号合格证的产品满足中国民用航空规章相关适航要求的条件和限制。

This data sheet, which is part of Type Certificate (No.:TC0017A), 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.

型号合格证持有人/Type Certificate Holder:

中国直升机设计研究所

CHINA HELICOPTER RESEARCH AND DEVELOPMENT
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第一部分: Z11(AC301)型别技术数据/SECTION A: Model Z11(AC301) TECHNICAL DATA

A I. 概述 (General)

1. 产品型别/Model: Z11(AC301)
2. 类别/Category: 正常类旋翼航空器/Normal Category Rotorcraft
3. 型号合格证申请日期/Application Date: 1993 年 3 月 3 日/March 3,1993
4. 型号合格证批准日期/Approval Date: 2001 年 4 月 12 日/April 12,2001

A II. 生产依据/Production Basis

生产许可证编号: PC019A

Production Certificate NO.: PC019A

A III. 审定基础/Certification Basis

(1) CCAR-27 (1988.4.21 生效), 以下例外:

27.361 采用了 FAR 27.361 (Amdt 27-23); 27.395 和 27.501 采用了 FAR 27.395 和 27.501(Amdt 27-26)。

27.2(a)采用 CCAR-27-R1 (2002.8.1 生效)

采用了修正案为 27-23 的 FAR 27.954 和 27.1027、修正案为 27-26 的 FAR 27.351 和 27.427, 和修正案为 27-27 的 27.427。

(2) 噪声审定标准为 FAR-36 (Amdt 36-21) 。

(3) 等效安全: §27.775、§27.1322(b)、§27.1505(c)。

(1) CCAR-27 (Effective on Apr 21,1988), except as follows:

27.361 adopts FAR 27.361 at Amdt 27-23, 27.395 and 27.501 adopt FAR 27.395 and 27.501 at Amdt 27-26.

27.2(a) adopts CCAR-27-R1(Effective on Aug 1,2002)

FAR 27.954 and 27.1027 at Amdt 27-23, FAR 27.351 and 27.427 at Amdt 27-26, and 27.427 at Amdt 27-27 are adopted.

(2) Certification standard for noise is FAR-36 (Amdt 36-21).

(3) Equivalent Level of Safety : §27.775、§27.1322(b)、§27.1505(c).

A IV. 技术特性和使用限制/Technical Characteristics and Operational Limitations

(1) 型号设计定义/Type Design Definition

《直 11 民用直升机图样目录》（Z11M-HZ-1,E 版及后续经批准版次）

《直 11 型机机载设备和零部件合格审定清单》（Z11-HZ-HM16,G 版及后续经批准版次）

《Z11 Civil Helicopter Drawing List》(Z11M-HZ-1,Rev.E or later approved revision)

《Z11 Airborne Equipment and Part Certification List》(Z11-HZ-HM16,Rev.G or later approved revision)

(2) 发动机 1 台 WZ-8D 型涡轮轴发动机(型号合格证编号: TC0016E)

-燃油 3 号喷气燃料 (GB6537)

-发动机滑油 MOBIL JET OIL II (MIL-L-23699)

Engine 1 WZ-8D turbine engine (TC No.:TC0016E)

Fuel No.3 jet fuel (GB6537)

Engine Oil MOBIL JET OIL II (MIL-L-23699)

(3) 发动机工作限制

-燃气发生器转速:

最大起飞 (5 分钟) 100.8%

最大连续 98%

最大瞬时 (小于 20 秒钟) 105.5%

-排气温度 (T₄):

发动机起动时最大值 795°C

发动机起动时最大瞬时值 (小于 10s) 865°C

起飞时的最大值 845°C

最大连续状态时 795°C

-关于包括燃油添加剂、转速和温度的其它限制见飞行手册。

Engine operation limits

-Gas generator speed

Maximum takeoff (5 minutes) 100.8%

Maximum continuous 98%

Maximum transient (less than 20 seconds) 105.5%

-Exhaust gas temperature (T₄)

Maximum during engine starting 795°C

Maximum transient during engine starting(less than 10s)	865°C
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Maximum during takeoff	845°C
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Maximum continuous	795°C
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-Other limitations of fuel additive, rotation speed and temperature refer to
Rotorcraft Flight Manual.

(4) 燃油容量

最大燃油容量	535 升
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不可用燃油容量	3 升
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Fuel capacity

Maximum fuel capacity	535 liters
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Unusable fuel capacity	3 liters
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(5) 滑油容量

主减系统滑油容量	6.5 升 (MOBIL JET OIL II)
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尾减系统滑油容量	0.33 升 (MOBIL JET OIL II)
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发动机系统滑油容量	6.2 升
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Oil capacity

MGB oil capacity	6.5 liters (MOBIL JET OIL II)
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TGB oil capacity	0.33 liters (MOBIL JET OIL II)
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Engine oil capacity	6.2 liters
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(6) 旋翼转速限制

最小 (有动力)	375 转/分钟
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最大 (有动力)	394 转/分钟
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最小 (无动力)	320 转/分钟
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最大 (无动力)	430 转/分钟
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低转速音响警告	360 转/分钟
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高转速音响警告	400 转/分钟
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Rotor speed limits

Minimum (power on)	375 r/min
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Maximum (power on)	394 r/min
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Minimum (power off)	320 r/min
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Maximum (power off) 430 r/min

Low speed aural warning 360 r/min

High speed aural warning 400 r/min

(7) 扭矩限制

最大扭矩:94% (指示空速 $\geq$ 74km/h)

100% (指示空速 $<$ 74km/h)

Torque limits

Maximum torque:94% (The indicated airspeed $\geq$ 74km/h)

100% (The indicated airspeed $<$ 74km/h)

(8) 空速限制 (校正空速)

参见《直 11 型直升机飞行手册》(Z11-RFM-1, 及后续经批准版次)

Airspeed limits (calibrated airspeed)

Refer to the 《Z11 Rotorcraft Flight Manual》(Z11-RFM-1, or later approved revision)

(9) 重心范围

-纵向重心限制

重心前限: 3.17 米 (适用于 1265 千克至 2000 千克), 3.20 米 (2200 千克), 2000 千克至 2200 千克之间线性变化。

重心后限: 3.43 米 (2200 千克), 3.496 米 (1265 千克), 2200 千克至 1265 千克之间线性变化。

-横向重心限制

重心左限: 0.18 米

重心右限: 0.14 米

C.G. limits

-Longitudinal C.G. limit

Forward limit: 3.17m (applicable for 1265kg to 2000kg), 3.20m (2200kg), linear variation between 2000kg and 2200kg.

Afterward limit: 3.43m (2200kg), 3.496m (1265kg), linear variation between 2200kg and 1265kg.

-Lateral C.G. limit

Left limit: 0.18m	
Right limit: 0.14m	
(10) 最大重量	2200 千克
Maximum weight	2200kg
(11) 测量基准	纵向: 主桨毂中心前 3.4 米 横向: 直升机机身纵向对称面
Measurement datum	Longitudinal: 3.4m in forward of main rotor hub center Lateral: the longitudinal symmetry plane of the helicopter fuselage
(12) 水平措施	按水平测量图 (Z11-0012-0) 进行纵向和横向测量
Leveling means	Leveling longitudinally and laterally according to the leveling measurement drawing (Z11-0012-0)
(13) 最小飞行机组	1 名驾驶员
Minimum crew	1 pilot
(14) 座位数量	6 名 (含驾驶员)
Number of Seats	6(including the pilot)
(15) 最大行李重量	
左行李舱	120 千克
右行李舱	100 千克
后行李舱	80 千克
Maximum baggage weight	
Left baggage compartment	120kg
Right baggage compartment	100kg
Rear baggage compartment	80kg
(16) 最大高度	
最大使用高度	5000 米 (压力高度)
最大起降高度	4267 米 (压力高度)
Maximum altitude	
Maximum operating altitude	5000m (pressure altitude)

Maximum take-off and landing altitude 4267m (pressure altitude)

(17) 环境温度限制

—最低气温 -40°C
—最高气温 ISA+35°C(≤50°C)

Ambient temperature limit

-Minimum temperature -40°C
-Maximum temperature ISA+35°C(≤50°C)

(18) 操纵面运动范围

总距 -0.34°~+13.74°
纵向 -10.92°~+14.53°
横向 -5.70°~+7.50°
航向 -6.60°~+21.10°

(注: 垂向以向上为正方向; 纵向以向前为正方向; 横、航向以向右为正方向)

Control movement range

Collective pitch -0.34°~+13.74°
Longitudinal -10.92°~+14.53°
Lateral -5.70°~+7.50°
Directional -6.60°~+21.10°

(Note: Up is the positive direction on the vertical directions; forward is the positive direction on the longitudinal directions; right is the positive direction on the lateral and directional directions)

(19) 设备 适用的适航规章 (见审定基础) 中规定的基本设备必须安装在直升机上。

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations (refer to Certification Basis) must be installed in the helicopter.

制造序号 Z11-036、Z11-046、Z11-047 及其之后的序列号
Manufacturer serial number Z11-036、Z11-046、Z11-047 and its subsequent serial numbers

(20) 运行限制

昼夜目视飞行

Operating limitations

Day and Night VFR operation

A V. 批准的技术资料/Approved Technical Documents

I、飞行手册/Rotorcraft Flight Manual

《直 11 型直升机飞行手册》(Z11-RFM-1, 及后续经批准版次)

《Z11 Rotorcraft Flight Manual》(Z11-RFM-1, or later approved revision)

II、持续适航文件/The Instructions for Continued Airworthiness

《直 11 型机适航性限制》(Z11-RMMP-AL-1, 及后续经批准版次)

《Z11 Airworthiness Limitations》(Z11-RMMP-AL-1, or later approved revision)

A VI. 注释/Notes

注释 1 在初始适航审定时, 对每架直升机必须提供现行的重量平衡报告, 该重量平衡报告中含有该直升机空机重量所装设备的清单。

注释 2 Z11 型民用直升机的制造必须符合《直 11 民用直升机图样目(Z11M-HZ-1, E 版及后续经批准版次)》和《直 11 型机机载设备和零部件合格审定清单》(Z11-HZ-HM16, G 版及后续经批准版次)。

Note 1 A current Weight and Balance Report must be provided for each helicopter at the time of initial airworthiness certification, including the list of equipment included in the empty weight of the helicopter.

Note 2 The manufacturing of Z11 civil helicopter must conform to 《Z11 Civil Helicopter Drawing List》(Z11M-HZ-1, Rev. E or later approved revision) and 《Z11 Airborne Equipment and Part Certification List》(Z11-HZ-HM16, Rev. G or later approved revision).

第二部分: Z11MB1(AC301A)型别技术数据/SECTION B: Model Z11MB1(AC301A)
TECHNICAL DATA

B I. 概述 (General)

1. 产品型别/Model: Z11MB1(AC301A)
2. 类别/Category: 正常类旋翼航空器/Normal Category Rotorcraft
3. 型号合格证申请日期/Application Date: 2002 年 4 月 10 日/April 10,2002
4. 型号合格证批准日期/Approval Date: 2003 年 12 月 23 日/December 23,2003

B II. 生产依据/Production Basis

生产许可证编号: PC019A

Production Certificate NO.: PC019A

B III. 审定基础/Certification Basis

(1) CCAR-27 (1988.4.21 生效), 以下例外:

27.361 采用了 FAR 27.361 (Amdt 27-23); 27.395 和 27.501 采用了 FAR 27.395 和 27.501 (Amdt 27-26)。

27.2(a)采用 CCAR-27-R1 (2002.8.1 生效)

采用了修正案为 27-23 的 FAR 27.954 和 27.1027、修正案为 27-26 的 FAR 27.351 和 27.427, 和修正案为 27-27 的 27.427。

(2) 噪声审定标准为 FAR-36 (Amdt 36-21) 。

(3) 等效安全: §27.775、§27.1322(b)、§27.1505(c)。

(1) CCAR-27 (Effective on Apr 21, 1988), except as follows:

27.361 adopts FAR 27.361 at Amdt 27-23, 27.395 and 27.501 adopt FAR 27.395 and 27.501 at Amdt 27-26.

27.2(a) adopts CCAR-27-R1 (Effective on Aug 1, 2002)

FAR 27.954 and 27.1027 at Amdt 27-23, FAR 27.351 and 27.427 at Amdt 27-26, and 27.427 at Amdt 27-27 are adopted.

(2) Certification standard for noise is FAR-36 (Amdt 36-21).

(3) Equivalent Level of Safety : §27.775、§27.1322(b)、§27.1505(c).

B IV. 技术特性和使用限制/Technical Characteristics and Operational Limitations

(1) 型号设计定义/Type Design Definition

《直 11MB1 型直升机图样目录》（Z11MB1-HZ-7,B 版及后续经批准版次）《直 11MB1 型机机载设备和零部件合格审定清单》（Z11MB1-HZ-5,C 版及后续经批准版次）

《Z11MB1 Civil Helicopter Drawing list》（Z11MB1-HZ-7,Rev.B or later approved revision）

《Z11MB1 Airborne Equipment and Part Certification List》（Z11MB1-HZ-5,Rev.C or later approved revision）

(2) 发动机

-型别 ARRIEL 2B1A (型号认可证编号: VTC0190E)

-装机数量 1 台

-制造商 法国透博梅卡公司

Engine

-Type ARRIEL 2B1A (VTC No.:VTC0190E)

-Numbers 1 engine

-Manufacturer TURBOMECA

(3) 发动机工作限制

-燃气发生器转速

最大起飞（5 分钟） 100.94%

最大连续 96.94%

最大瞬时（小于 20 秒钟） 102.3%

-排气温度（T₄）

发动机起动时最大值 750°C

发动机起动时最大瞬时值（小于 10s） 865°C

起飞时的最大值 915°C

最大连续状态时 849°C

起动后最大瞬时状态（小于 20 秒钟） 941°C

-关于包括燃油添加剂、转速和温度的其它限制见飞行手册。

Engine operation limits

- Gas generator speed

Maximum takeoff (5 minutes) 100.94%

Maximum continuous 96.94%

Maximum transient (less than 20 seconds) 102.3%

-Exhaust gas temperature (T4)

Maximum during engine starting 750°C

Maximum transient during engine starting(less than 10 seconds) 865°C

Maximum during takeoff 915°C

Maximum continuous 849°C

Maximum transient after starting (less than 20 seconds) 941°C

-Other limitations of fuel additive, rotation speed and temperature refer to Rotorcraft Flight Manual.

(4) 燃油

-国内牌号

燃油: 3 号喷气燃料(GB6537)

-国外牌号

技术条件符合最新更改单最新标准

燃油型号	北约符号	技术条件提供更更改单或现行标记			防冰添加剂
		法国	美国	英国	
50 航空煤油	F34	AIR3405	MIL-T-83 133	D.Eng.RD	有
		F34	JP8	2453	
50 航空煤油	F35	AIR3405	ASTM-D-1655	D.Eng.RD	无
		F35	Jet A1	2494	
航空煤油	—	—	ASTM-D-1655	—	无
			Jet A		
高闪点油 JP5	F44	AIR3404	MIL-T-5624	D.Eng.RD	有
		F44	JP5	2452	
航空煤油	—	—	GOST	—	无
			10227		

Fuel

-China Fuel Type

Fuel:No.3 jet fuel (GB6537)

-Foreign Fuel Type

Technical condition complies with updated change order and updated standard					
Fuel Type	NATO	Technical condition provide change order or current sign			Water proof additive
		France	U.S.A	U.K	
Aviation kerosene (AVTUR-FS11)JP8	F34	AIR3405 F34	MIL-T-83 133 JP8	D.Eng.RD 2453	Yes
Aviation kerosene (AVTUR)JP1	F35	AIR3405 F35	ASTM-D-1655 Jet A1	D.Eng.RD 2494	None
Aviation kerosene	—	—	ASTM-D-1655 Jet A	—	None
High-flash oil (AVCATFS11)	F44	AIR3404 F44	MIL-T-5624 JP5	D.Eng.RD 2452	Yes
Aviation kerosene TS1, RT	—	—	GOST 10227	—	None

(5) 燃油容量

最大燃油容量 535 升

不可用燃油容量 3 升

Fuel capacity

Maximum fuel capacity 535 liters

Unusable fuel capacity 3 liters

(6) 发动机滑油

滑油类型	北约编号	技术规格		推荐的滑油牌号
		法国	美国	
合成油在 98.9℃时, 运动粘度为 $5 \times 10^{-6} \text{m}^2/\text{s}$	0-156	—	MIL-PRF-23699	·Aero Shell Turbine Oil 560
				·EXXON Turbo Oil 2197
				·BP TURBO OIL 2197
				·MOBIL JET OIL 254
				·MOBIL JET OIL 291
合成油在 98.9℃时, 运动粘度为 3~5 $\times 10^{-6} \text{m}^2/\text{s}$	0-148	—	MIL-PRF-7808	·MOBIL JET OIL II
				·CASTROL 325
				·EXXON TURBO OIL 2389
				·BP TURBO OIL 2389
				·TURBO NYCOIL 13B
	0-150	AIR 3514	—	

Engine oil

Oil type	NATO	Specification		Recommended grade
		France	U.S.A	
When resultant oil temperature is at 98.9℃, motion viscosity is $5 \times 10^{-6} \text{m}^2/\text{s}$	0-156	—	MIL-PRF-23699	·Aero Shell Turbine Oil 560
				·EXXON Turbo Oil 2197
				·BP TURBO OIL 2197
				·MOBIL JET OIL 254
				·MOBIL JET OIL 291
When resultant oil temperature is at 98.9℃, motion viscosity is 3~5 $\times 10^{-6} \text{m}^2/\text{s}$	0-148	—	MIL-PRF-7808	·MOBIL JET OIL II
				·CASTROL 325
				·EXXON TURBO OIL 2389
				·BP TURBO OIL 2389
				·TURBO NYCOIL 13B
	0-150	AIR 3514	—	

(7) 滑油容量

主减系统滑油容量 6.5 升(MOBIL JET OIL II)

尾减系统滑油容量 0.33 升(MOBIL JET OIL II)

发动机系统滑油容量 6.2 升

Oil capacity

MGB oil capacity 6.5 liters (MOBIL JET OIL II)

TGB oil capacity 0.33 liters (MOBIL JET OIL II)

Engine oil capacity 6.2 liters

(8) 旋翼转速限制

有动力 (自动) 386±1 转/分钟

393±1 转/分钟

有动力 (手动) 386^{+8}_{-11} 转/分钟

最小 (无动力) 320 转/分钟

最大 (无动力) 430 转/分钟

低转速音响警告 360 转/分钟

高转速音响警告 400 转/分钟

Rotor speed limits

Power on (automatic) 386±1 r/min

393±1 r/min

Power on (manual) 386^{+8}_{-11} r/min

Minimum (power off) 320 r/min

Maximum (power off) 430 r/min

Low speed aural warning 360 r/min

High speed aural warning 400 r/min

(9) 扭矩限制

最大扭矩:94% (指示空速≥74km/h)

100% (指示空速<74km/h)

Torque limits

Maximum torque:94% (The indicated airspeed≥74km/h)

100% (The indicated airspeed<74km/h)

(10) 空速限制 (校准空速)

参见《直 11MB1 型直升机飞行手册》(Z11MB1-RFM-1, 及后续经批准版次)。

Airspeed limits (calibrated airspeed)

Refer to the 《Z11MB1 Rotorcraft Fight Manual》(Z11MB1-RFM-1, or later approved revision)

(11) 重心范围

-纵向重心限制

重心前限: 3.17 米 (适用于 1295 千克至 2000 千克), 3.20 米 (2200 千克), 2000 千克至 2200 千克之间线性变化。

重心后限: 3.43 米 (2200 千克), 3.493 米 (1295 千克), 2200 千克至 1295 千克之间线性变化。

-横向重心限制

重心左限: 0.18 米

重心右限: 0.14 米

C.G. limits

- Longitudinal C.G. limit

Forward limit: 3.17m (applicable for 1295kg to 2000kg), 3.20m(2200kg), linear variation between 2000kg and 2200kg.

Afterward limit: 3.43m (2200kg), 3.496m (1295kg), linear variation between 2200kg and 1295kg.

- Lateral C.G. limit

Left limit: 0.18m

Right limit: 0.14m

(12) 最大重量 2200 千克

Maximum weight 2200kg

(13) 测量基准 纵向: 主桨毂中心前 3.4 米

横向: 直升机机身纵向对称面

Measurement datum Longitudinal: 3.4m in forward of main rotor hub center

Lateral: the longitudinal symmetry plane of the helicopter fuselage

(14) 水平措施 按水平测量图 (Z11-0012-0) 进行纵向和横向测水平

Leveling means Leveling longitudinally and laterally according to the leveling measurement drawing (Z11-0012-0)

(15) 最小飞行机组 1 名驾驶员

Minimum crew 1 pilot

(16) 座位数量 6 名 (含驾驶员)

Number of Seats 6(including the pilot)

(17) 最大行李重量

左行李舱 120 千克

右行李舱 100 千克

后行李舱 80 千克

Maximum baggage weight

Left baggage compartment 120kg

Right baggage compartment 100kg

Rear baggage compartment 80kg

(18) 最大高度

最大使用高度 5500 米 (压力高度)

最大起降高度 4267 米 (压力高度)

Maximum altitude

Maximum operating altitude 5500m (pressure altitude)

Maximum take-off and landing altitude 4267m (pressure altitude)

(19) 环境温度限制

— 最低气温 -40°C

— 最高气温 ISA+35°C(≤50°C)

Ambient temperature limit

-Minimum temperature -40°C

-Maximum temperature ISA+35°C(≤50°C)

(20) 操纵面运动范围

总距	-0.34°~+13.74°
纵向	-10.92°~+14.53°
横向	-5.70°~+7.50°
航向	-6.60°~+21.10°

(注：垂向以向上为正方向；纵向以向前为正方向；横、航向以向右为正方向)

Control movement range

Collective pitch	-0.34°~+13.74°
Longitudinal	-10.92°~+14.53°
Lateral	-5.70°~+7.50°
Directional	-6.60°~+21.10°

(Note: Up is the positive direction on the vertical directions; forward is the positive direction on the longitudinal directions; right is the positive direction on the lateral and directional directions)

- (21) 设备 适用的适航规章（见审定基础）中规定的基本设备必须安装在直升机上。

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations (refer to Certification Basis) must be installed in the helicopter.

- (22) 制造序列号 Z11MB1-00 及其之后的序列号

Manufacturer serial number Z11MB1-00 and its subsequent serial numbers

- (23) 运行限制

昼夜目视飞行

Operating limitations

Day and Night VFR operation.

B V. 批准的技术资料/Approved Technical Documents

I、飞行手册/Rotorcraft Flight Manual

《直 11MB1 型直升机飞行手册》（Z11MB1-RFM-1，及后续经批准版次）

《Z11MB1 Rotorcraft Flight Manual》(Z11MB1-RFM-1, and later approved revision)

II、持续适航文件/The Instructions for Continued Airworthiness

《直 11MB1 型机适航性限制》（Z11MB1-RMMP-AL-1，及后续经批准版次）

《Z11MB1 Airworthiness Limitations》（Z11MB1-RMMP-AL-1， and later approved revision)

B VI. 注释/Notes

注释 1 在初始适航审定时，对每架直升机必须提供现行的重量平衡报告，该重量平衡报告中含有该直升机空机重量所装设备的清单。

注释 2 Z11MB1 型直升机的制造必须符合《直 11MB1 型直升机图样目录》（Z11MB1-HZ-7,B 版及后续经批准版次）和《直 11MB1 型机机载设备和零部件合格审定清单》（Z11MB1-HZ-5 ,C 版及后续经批准版次）。

Note 1 A current Weight and Balance Report must be provided for each helicopter at the time of initial airworthiness certification,including the list of equipment included in the empty weight of the helicopter.

Note 2 The manufacturing of Z11MB1 must conform to 《Z11MB1 Helicopter Drawing List》(Z11MB1-HZ-7,Rev.B or later approved revision) and 《Z11MB1 Airborne Equipment and Part Certification List》(Z11MB1-HZ-5,Rev.C or later approved revision).

第三部分: Z11M-100 (AC311) 型别技术数据/SECTION C: Model Z11M-100 (AC311)
TECHNICAL DATA

C I. 概述 (General)

1. 产品型别/Model: Z11M-100 (AC311)
2. 类别/Category: 正常类旋翼航空器/Normal Category Rotorcraft
3. 型号合格证申请日期/Application Date: 2009 年 9 月 27 日/September 27, 2009
4. 型号合格证批准日期/Approval Date: 2012 年 5 月 8 日/May 8, 2012

C II. 生产依据/Production Basis

生产许可证编号: PC019A

Production Certificate NO.: PC019A

C III. 审定基础/Certification Basis

(1) CCAR-27(1988.4.21 生效), 以下除外:

CCAR-27-R1 (2002.8.1 生效) 修订的以下条款: CCAR27.2(a), 27.65(b), 27.175, 27.307(a), 27.351, 27.361, 27.427, 27.501, 27.602, 27.610(d), 27.613(b)(e), 27.629, 27.663(a), 27.775, 27.783(b), 27.805, 27.807(a)(b), 27.853(a)(c), 27.861, 27.901, 27.903(a)(c), 27.955(a), 27.1027, 27.1091(d), 27.1141(c), 27.1143, 27.1163(b), 27.1187, 27.1193(f), 27.1303, 27.1305, 27.1337(e)。

(2) 噪声审定标准: CCAR-36-R1 (2007.4.15 生效)。

(3) 专用条件: 高能电磁辐射 (HIRF)。

(4) 等效安全: CCAR-27.1545、27.1549。

(1)CCAR-27 (Effective on Apr 21, 1988), except as follows:

CCAR27.2(a), 27.65(b), 27.175, 27.307(a), 27.351, 27.361, 27.427, 27.501, 27.602, 27.610(d), 27.613(b)(e), 27.629, 27.663(a), 27.775, 27.783(b), 27.805, 27.807(a)(b), 27.853(a)(c), 27.861, 27.901, 27.903(a)(c), 27.955(a), 27.1027, 27.1091(d), 27.1141(c), 27.1143, 27.1163(b), 27.1187, 27.1193(f), 27.1303, 27.1305, 27.1337(e) as amended by CCAR-27-R1 (Effective on Aug 1, 2002).

(2) Certification standard for noise: CCAR-36-R1 (Effective on Apr 15, 2007).

(3) Specified condition: High-intensity Radiated Fields (HIRF).

(4) Equivalent level of safety:CCAR-27.1545、27.1549.

C IV. 技术特性和使用限制/Technical Characteristics and Operational Limitations

(1) 型号设计定义/Type Design Definition

《直 11M-100 型机图样目录》(DVLB007G7005C01,F 版及后续经批准版次)《直 11M-100 型机机载设备和零部件合格审定清单》(DVLB001G7001C01,H 版及后续经批准版次)

《Z11M-100 Civil Helicopter Drawing list》(Z11M-HZ-1,Rev.F or its later approved revision)

《Z11M-100 Airborne Equipment and Part Certification List》(Z11-HZ-HM16,Rev.H or later approved revision)

(2) 发动机

型别 LTS101-700D-2(型号认可证编号: VTC0250E)

装机数量 一台

制造人 HONEYWELL

Engine

-Type LTS101-700D-2(VTC No.: VTC0250E)

-Numbers 1 engine

-Manufacturer Honeywell International Inc

(3) 发动机限制

	燃气发生器转速(Ng)	排气温度(T ₄)
最大瞬时	107.2%	944°C
最大起飞	106.6%	923°C
最大连续	104.8%	890°C

Engine limits

	Gas generator speed (Ng)	Exhaust gas temperature (T ₄)
Maximum transient	107.2%	944°C
Maximum takeoff	106.6%	923°C
Maximum continuous	104.8%	890°C

(4) 燃油和燃油容量

燃油 3 号喷气燃料(GB6537)

最大燃油容量 535 升

不可用燃油容量 3 升

Fuel and fuel capacity

Fuel No.3 jet fuel (GB6537)

Maximum fuel capacity 535 liters

Unusable fuel capacity 3 liters

(5) 滑油和滑油容量

-滑油:

发动机滑油牌号 MOBIL JET OIL 254 或 BP TURBO OIL 2197

传动系统滑油牌号 MOBIL JET OIL II

尾减系统滑油牌号 MOBIL JET OIL II

-滑油容量:

主减系统滑油容量 6.5 升

尾减系统滑油容量 0.33 升

发动机滑油容量 6.2 升

Oil and oil capacity

- Oil:

Engine oil type MOBIL JET OIL 254 or BP TURBO OIL 2197

Oil type for transmission system MOBIL JET OIL II

Oil spec for TGB MOBIL JET OIL II

-Oil capacity:

MGB oil capacity 6.5 liters

TGB oil capacity 0.33 liters

Engine oil capacity 6.2 liters

(6) 旋翼转速限制

有动力时

地面低桨距运转连续工作转速范围 380 ± 5 r/min

空中飞行连续工作转速范围 386^{+8}_{-11} r/min

无动力时

最大转速 430 r/min

最小转速 320 r/min

Rotor speed limits

Power on

Low pitch on ground 380 ± 5 r/min

Continuous operating speed in flight 386^{+8}_{-11} r/min

Power off

Maximum speed 430 r/min

Minimum speed 320 r/min

(7) 扭矩限制

最大扭矩:94% (指示空速 ≥ 74 km/h)

100% (指示空速 < 74 km/h)

Torque limits

Maximum torque:94% (The indicated airspeed ≥ 74 km/h)

100% (The indicated airspeed < 74 km/h)

(8) 空速限制 (校准空速)

参见《AC311 直升机飞行手册》(适用于全静压系统 A)(JZ-AC311-02-1,A 版及后续经批准版次);《AC311 直升机飞行手册》(适用于全静压系统 B)(JZ-AC311-02-2,A 版及后续经批准版次)。

Airspeed limits (calibrated airspeed)

Refer to the 《AC311 Rotorcraft Fight Manual》(For Pitot-Static system A) (JZ-AC311-02-1,Rev.A or later approved revision); 《AC311 Rotorcraft Fight Manual》(For Pitot-Static system B) (JZ-AC311-02-2,Rev.A or later approved revision).

(9) 重心范围

-纵向重心限制

重心前限: 3.170 米

重心后限: 3.349 米

-横向重心限制

重心左限: 0.18 米

重心右限: 0.14 米

C.G. limits

- Longitudinal C.G. limit

Forward limit:3.170m

Afterward limit:3.349m

- Lateral C.G. limit

Left limit:0.18m

Right limit:0.14m

(10) 最大重量 2200 千克

Maximum weight 2200kg

(11) 测量基准

-纵向: 主桨毂中心前 3.4 米

-横向: 直升机机身纵向对称面

Measurement datum

-Longitudinal:3.4m in forward of main rotor hub center

-Lateral:the longitudinal symmetry plane of the helicopter fuselage

(12) 水平测量措施

按照《直 11M-100 型机水平测量与检查技术条件》(TN B082G5001C01A) 进行纵向和横向测水平

Leveling means

Leveling longitudinally and laterally according to 《The Leveling Measurement and Inspection Technical Condition of Z11M-100》(TN B082G5001C01A)

(13) 最小飞行机组 1 名驾驶员

Minimum crew 1 pilot

(14) 座位数量 6 座(含正副驾驶员座椅)

Seats number 6(including the seats for pilot and co-pilot)

(15) 最大行李/货物重量

左行李舱 120 千克

右行李舱	100 千克
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后行李舱	80 千克
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Maximum Baggage/Cargo weight

Left luggage compartment	120kg
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Right luggage compartment	100kg
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Back luggage compartment	80kg
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(16) 最大高度

最大使用高度	19685 英尺（压力高度）
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最大起降高度	13450 英尺（压力高度）
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Maximum altitude

Maximum operating altitude	19685ft(pressure altitude)
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Maximum take-off and landing altitude	13450ft(pressure altitude)
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(17) 环境温度限制

最低气温	-40°C
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最高气温	ISA+35°C(≤50°C)
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Ambient temperature limit

Minimum temperature	-40°C
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Maximum temperature	ISA+35°C(≤50°C)
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(18) 操纵面运动范围

总距	-0.34°~+13.74°
----	----------------

纵向	-10.92°~+14.53°
----	-----------------

横向	-5.70°~+7.50°
----	---------------

航向	-6.60°~+21.10°
----	----------------

（注：垂向以向上为正方向；纵向以向前为正方向；横、航向以向右为正方向）

Control movement range

Collective pitch	-0.34°~+13.74°
------------------	----------------

Longitudinal	-10.92°~+14.53°
--------------	-----------------

Lateral	-5.70°~+7.50°
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Directional	-6.60°~+21.10°
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(Note: Up is the positive direction on the vertical directions; forward is the positive direction on the longitudinal directions; right is the positive direction on the lateral and directional directions)

(19) 设备

适用的适航规章(见审定基础)所要求的基本设备必须安装在航空器上以满足型号合格审定的要求。

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (refer to Certification Basis) must be installed in the aircraft to meet the requirements of type certification.

(20) 制造人序列号 Z11M-100-001、Z11M-100-003、Z11M-100-007
及其之后的序列号。

Manufacture serial number Z11M-100-001、Z11M-100-003、Z11M-100-007
and its subsequent serial numbers.

(21) 运行限制

—昼间目视飞行

—在增装固定式着陆灯情况下，可按夜间目视飞行规则运行

Operating limitations

-Day VFR operation

-Night VFR operation rules with additional fixed landing lights

C V. 批准的技术资料/Approved Technical Documents

I、飞行手册/Rotorcraft Flight Manual

《AC311 直升机飞行手册》(适用于全静压系统 A)(JZ-AC311-02-1,A 版及后续经批准版次)

《AC311 直升机飞行手册》(适用于全静压系统 B)(JZ-AC311-02-2,A 版及后续经批准版次)

《AC311 Rotorcraft Flight Manual》(For Pitot-Static System A)

(JZ-AC311-02-1,Rev.A or later approved revision)

《AC311 Rotorcraft Flight Manual》(For Pitot-Static System B)

(JZ-AC311-02-2,Rev.A or later approved revision)

II、持续适航文件/The Instructions for Continued Airworthiness

《AC311 直升机维护手册-适航性限制》（JZ-AC311-04,A 版及后续经批准版次）

《AC311 Maintenance Manual- Airworthiness Limitations》(JZ-AC311-04,Rev.A or later approved revision)

C VI. 注释/Notes

注释 1 在初始适航审定时，对每架直升机必须提供现行的重量平衡报告，该重量平衡报告中含有该直升机空机重量所装设备的清单。

注释 2 Z11M-100 型机（AC311）的生产制造必须符合《直 11M-100 型机图样目录》（DVLB007G7005C01,F 版及后续经批准版次）和《直 11M-100 型机机载设备和零部件合格审定清单》（DVLB001G7001C01,H 版及后续经批准版次）。

Note 1 A current Weight and Balance Report must be provided for each helicopter at the time of initial airworthiness certification,including the list of equipment included in the empty weight of the helicopter.

Note 2 The manufacturing of Z11M-100 (AC311) must conform to 《Z11M-100 Helicopter Drawing List》(DVLB007G7005C01,Rev.F or later approved revision) and 《Z11M-100 Airborne Equipment and Part Certification List》(DVLB001G7001C01 Rev.H or later approved revision).

第四部分: AC311A 型别技术数据/SECTION D: Model AC311A TECHNICAL DATA

D I. 概述 (General)

1. 产品型别/Model: AC311A
2. 类别/Category: 正常类旋翼航空器/Normal Category Rotorcraft
3. 型号合格证申请日期: 2013 年 3 月 29 日, 2016 年 5 月 9 日申请书有效期延长申请/Application Date: March 29, 2013, May 9, 2016, Application for extension of validity
4. 型号合格证批准日期/Approval Date: 2016 年 8 月 15 日/August 15, 2016

D II. 生产依据/Production Basis

生产许可证编号: PC019A

Production Certificate No.: PC019A

D III. 审定基础/Certification Basis

(1) CCAR-27(1988.4.21 生效), 以下除外:

CCAR-27-R1 (2002.8.1 生效) 修订的以下条款: CCAR27.2(a), 27.65(b), 27.175, 27.307(a), 27.351, 27.361, 27.427, 27.501, 27.602, 27.610(d), 27.613(b)(e), 27.629, 27.663(a), 27.674, 27.775, 27.783(b), 27.805, 27.807(a)(b), 27.853(a)(c), 27.861, 27.901, 27.903(a)(c), 27.955(a), 27.1027, 27.1091(d), 27.1141(c), 27.1143, 27.1151, 27.1163(b), 27.1185(d), 27.1187, 27.1193(f), 27.1303, 27.1305, 27.1337(e), 27.1457, 27.1459。

(2) 噪声审定标准: CCAR-36-R1 (2007.4.15 生效)

(3) 专用条件

高强辐射场 (HIRF), 编号: SC-27-01 (颁发日期: 2015-11-13)

(4) 等效安全

空速指示数字化方式的等效安全 CCAR-27.1545, 见问题纪要 IP-EE-002

(1) CCAR-27(Effective on Apr 21, 1988), except as follows:

CCAR27.2(a), 27.65(b), 27.175, 27.307(a), 27.351, 27.361, 27.427, 27.501, 27.602, 27.610(d), 27.613(b)(e), 27.629, 27.663(a), 27.674, 27.775, 27.783(b), 27.805, 27.807(a)(b), 27.853(a)(c), 27.861, 27.901, 27.903(a)(c), 27.955(a), 27.1027, 27.1091(d), 27.1141(c), 27.1143,

27.1151, 27.1163(b), 27.1185(d), 27.1187, 27.1193(f), 27.1303, 27.1305, 27.1337(e), 27.1457, 27.1459 as amended by CCAR-27-R1(Effective on Aug 1, 2002).

(2) Certification standard for noise is CCAR-36-R1 (Effective on Apr 15, 2007).

(3) Special Condition

High-intensity Radiated Fields (HIRF) No.: SC-27-01 (Issued on Nov 13, 2015)

(4) ELOS for Digital Airspeed Indication See Issue Paper EE-002

Equivalent level of safety CCAR-27.1545

D IV. 技术特性和使用限制/Technical Characteristics and Operational Limitations

(1) 型号设计定义/Type Design Definition

《AC311A 直升机构型清单目录》(DVLBF007G7011C01, G 版及后续经批准版次);

《AC311A 直升机机载设备和零部件合格审定清单》(DVLBF000G7007C01, F 版及后续经批准版次);

《AC311A 直升机全机机载软件清单》(DVLBF000G7015C01, L 版及后续经批准版次)。

《AC311A Configuration List》(DVLBF007G7011C01, Rev.G or its later approved revision);

《AC311A Airborne Equipment and Part Certification List》(DVLBF000G7007C01, Rev.F or later approved revision);

《AC311A Airborne Software List》(DVLBF000G7015C01, Rev.L or later approved revision).

(2) 发动机

型别 ARRIEL 2B1A (型号认可证编号: VTC0190E)

装机数量 一台

制造人 法国透博梅卡公司

Engine

Type ARRIEL 2B1A (VTC No.: VTC0190E)

Numbers 1 engine

Manufacturer Turbomeca Inc

(3) 发动机工作限制

海平面标准大气条件下

	燃气发生器转速(Ng)	燃气温度(T ₄)
最大瞬时	101.94%	941°C
最大起飞	100.94%	915°C
最大连续	96.94%	849°C

Engine limits

At ISA, Sea Level

	Gas generator speed (Ng)	Gas temperature at gas generate turbine outlet (T ₄)
Maximum transient	101.94%	941°C
Maximum takeoff	100.94%	915°C
Maximum continuous	96.94%	849°C

(4) 燃油和燃油容量

燃油 3 号喷气燃料(GB6537)

最大燃油容量 535 升

不可用燃油容量 3 升

Fuel and fuel capacity

Fuel No.3 jet fuel(GB6537)

Maximum fuel capacity 535 liters

Unusable fuel capacity 3 liters

(5) 滑油和滑油容量

-滑油

发动机滑油牌号 MOBIL JET OIL II; MOBIL JET OIL 254 或 BP
TURBO OIL 2197

主减速系统滑油牌号 MOBIL JET OIL II

尾减系统滑油牌号 MOBIL JET OIL II

-滑油容量:

主减系统滑油容量	6.5 升
尾减系统滑油容量	0.33 升
发动机滑油容量	6.2 升

Oil and oil capacity

-Oil

Engine oil type	MOBIL JET OIL II; MOBIL JET OIL 254 or BP TURBO OIL 2197
Oil type for MGB	MOBIL JET OIL II
Oil spec for TGB	MOBIL JET OIL II

-Oil capacity

MGB oil capacity	6.5 liters
TGB oil capacity	0.33 liters
Engine oil capacity	6.2 liters

(6) 旋翼转速限制

有动力时

正常工作转速范围 386^{+8}_{-11} r/min

无动力时

最大转速 430r/min

最小转速 335r/min

Rotor speed limits

-Power on

Normal speed range 386^{+8}_{-11} r/min

-Power off

Maximum speed 430r/min

Minimum speed 335r/min

(7) 扭矩限制

最大扭矩:94% (指示空速 $\geq$ 74km/h)100% (指示空速 $<$ 74km/h)

其它限制参见《AC311A 直升机飞行手册》(JZ-AC311A-02,B 版及后续经

批准版次)。

Torque limits

Maximum torque:94% (The indicated airspeed $\geq$ 74km/h)

100% (The indicated airspeed<74km/h)

Other limits refer to 《AC311A Rotorcraft Flight Manual》

(JZ-AC311A-02,Rev.B or later approved revision).

(8) 空速限制 (校正空速)

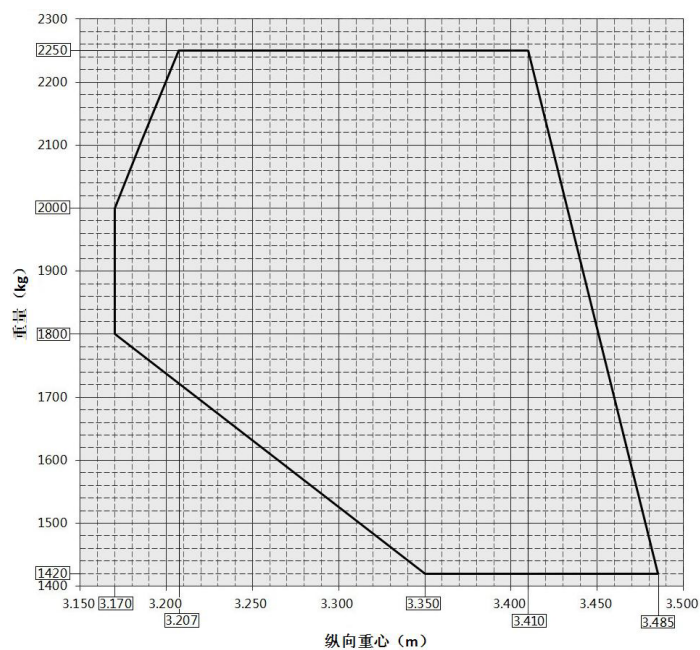
参见《AC311A 直升机飞行手册》(JZ-AC311A-02,B 版及后续经批准版次)

Airspeed limits (calibrated airspeed)

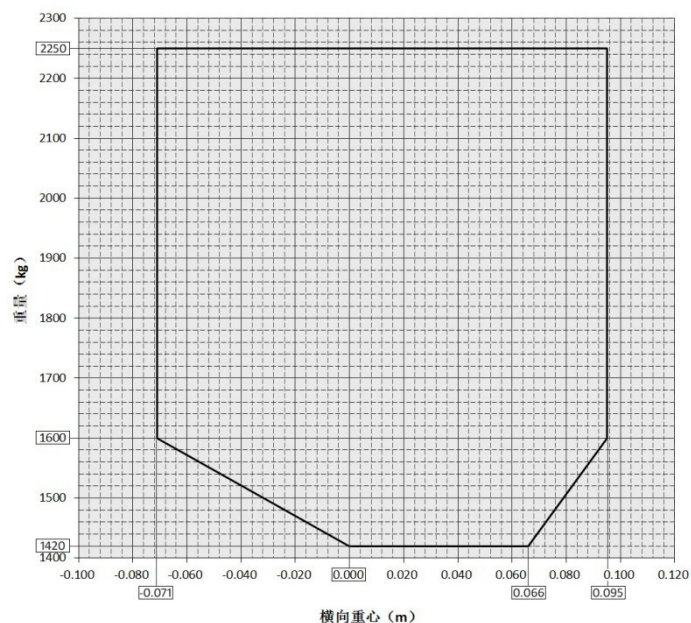
Refer to 《AC311A Rotorcraft Flight Manual》 (JZ-AC311A-02,Rev.B or later approved revision)

(9) 重心范围 (参见飞行手册) \C.G range(Refer to Rotorcraft Flight Manual)

-纵向重心限制\Longitudinal C.G limit



-横向重心限制\Lateral C.G limit



(10) 最大重量 2250 千克

Maximum weight 2250kg

(11) 测量基准

-纵向: 主桨毂中心前 3.40 米

-横向: 直升机机身纵向对称面

Measurement datum

-Longitudinal: 3.4m in forward of main rotor hub center

-Lateral: the longitudinal symmetry plane of the helicopter fuselage

(12) 水平测量措施

按照《AC311A 型机水平测量与检查技术条件》(TN BF082G5002C01A) 进行纵向和横向测水平。

Leveling means

Leveling longitudinally and laterally according to 《The Leveling Measurement and Inspection Technical Condition of AC311A》(TN BF082G5002C01A).

(13) 最小飞行机组 1 名驾驶员

Minimum crew 1 pilot

(14) 座位数量 6 座(含正副驾驶座椅)

Number of Seats 6(including the seats for pilot and co-pilot)

(15) 最大行李/货物重量

左行李舱 120 千克

右行李舱 100 千克

后行李舱 80 千克

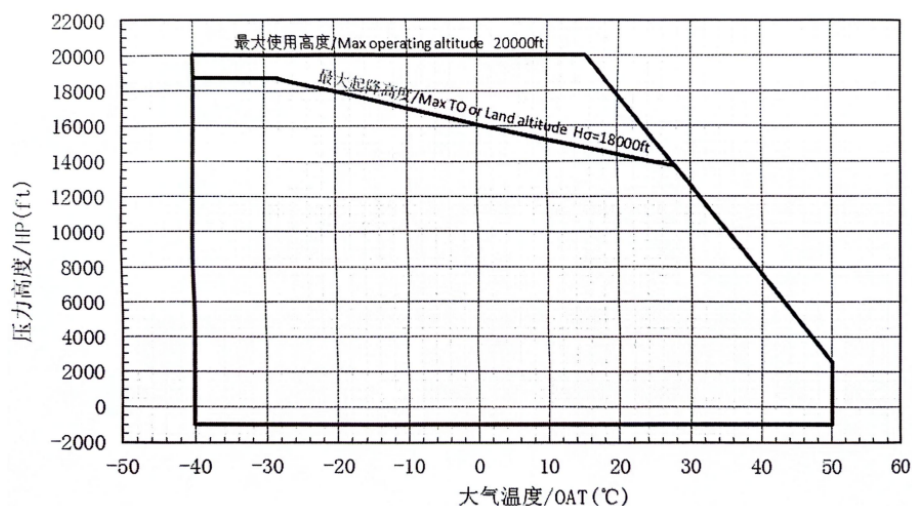
Maximum Baggage/Cargo weight

Left luggage compartment 120kg

Right luggage compartment 100kg

Back luggage compartment 80kg

- (16) 最大高度（参见飞行手册）/Maximum altitude(Refer to Rotorcraft Flight Manual)



高度-温度包线 (Height-Temperature Envelope)

- (17) 环境温度限制

—最低气温 -40°C

—最高气温 ISA+40°C(≤+50°C)

Ambient temperature limit

-Minimum temperature -40°C

-Maximum temperature ISA+40°C(≤+50°C)

- (18) 操纵面运动范围

总距 -0.34°~+13.74°

纵向 -10.92°~+14.53°

横向 -5.70°~+7.50°

航向 -6.60°~+21.10°

(注: 垂向以向上为正方向; 纵向以向前为正方向; 横、航向以向右为正方向)

Control movement range

Collective pitch	-0.34°~+13.74°
Longitudinal	-10.92°~+14.53°
Lateral	-5.70°~+7.50°
Directional	-6.60°~+21.10°

(Note: Up is the positive direction on the vertical directions; forward is the positive direction on the longitudinal directions.; right is the positive direction on the lateral and directional directions)

(19) 设备

适用的适航规章(见审定基础)所要求的基本设备必须安装在航空器上以满足型号合格审定的要求。

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (refer to Certification Basis) must be installed in the aircraft to meet the requirements of type certification.

(20) 制造序号 002、1001 及其之后的序列号

Manufacture serial number 002、1001 and its subsequent serial numbers

(21) 运行限制

昼夜目视飞行

Operating limitations

Day and Night VFR operation

D V. 批准的技术资料/Approved Technical Documents

I、飞行手册/Rotorcraft Flight Manual

《AC311A 直升机飞行手册》(JZ-AC311A-02,B 版及后续经批准版次)

《AC311A Rotorcraft Flight Manual》(JZ-AC311A-02,Rev.B or later approved revision)

II、持续适航文件/The Instructions for Continued Airworthiness

《AC311A 直升机适航性限制》(JZ-AC311A-30-ALS,A 版及后续经批准版次)

《AC311A Airworthiness Limitations》(JZ-AC311A-30-ALS,Rev.A or later approved revision)

D VI.注释/Notes

注释 1 AC311A 型机的生产制造必须符合《AC311A 直升机构型清单目录》(DVLBF007G7011C01,G 版及后续经批准版次)、《AC311A 直升机机载设备和零部件合格审定清单》(DVLBF000G7007C01,E 版及后续经批准版次)和《AC311A 直升机全机机载软件清单》(DVLBF000G7015C01,L 版及后续经批准版次)。

注释 2 运行必须依照 CAAC 批准的飞行手册《AC311A 直升机飞行手册》(JZ-AC311A-02, B 版及后续经批准版次)。

注释 3 AC311A 的持续适航文件在首架直升机交付或颁发标准适航证之前(以先到为准)必须是完备的。

Note1 The manufacturing of AC311A must conform to 《AC311A Configuration List》(DVLBF007G7011C01,Rev.G or later approved revision), 《AC311A Airborne Equipment and Part Certification List》(DVLBF000G7007C01,Rev.E or later approved revision) and 《AC311A Airborne Software List》(DVLBF000G7015C01,Rev.L or later approved revision).

Note2 Operation must be in accordance with the CAAC approved Flight Manual, 《AC311A Rotorcraft Flight Manual》(JZ-AC311A-02,Rev.B or later approved revision).

Note3 The Instruction of Continuous Airworthiness(ICA) of AC311A must be completed before the delivery of first helicopter or the issuing of standard airworthiness certificate (whichever comes first).

第五部分：管理信息/SECTION E:ADMINISTRATIVE INFORMATION

E I.型号合格证持有人记录/Type Certificate Holder Record

中国直升机设计研究所,中国江西省景德镇市航空路 6-8 号 333001
 CHINA HELICOPTER RESEARCH AND DEVELOPMENT
 INSTITUTE (CHRDI),NO.6-8,HANGKONG ROAD,JING DEZHEN,
 JIANGXI PROVINCE, CHINA POST CODE:333001

E II.修订记录/Change Records

数据单版次信息/Revision of the Type Certificate Data Sheet

状态 Status	数据单编号、版次和颁发日期 Type Certificate Data Sheet Number,Revision and issuance date
当前 Current	No.TC0017A, 版次 6, 2024 年 09 月 19 日 No.TC0017A,Revision 6, Sep. 19,2024
历史 History	No.TC0017A, 版次 5, 2016 年 08 月 15 日 No.TC0017A,Revision 5,August 15,2016
历史 History	No.TC0017A, 版次 4, 2014 年 06 月 24 日 No.TC0017A,Revision 4,June 24,2014
历史 History	No.TC0017A, 版次 3, 2012 年 05 月 08 日 No.TC0017A,Revision 3,May 8,2012
历史 History	No.TC0017A, 版次 2, 2003 年 12 月 23 日 No.TC0017A,Revision 2,December 23,2003
历史 History	No.TC0017A, 版次 1, 2001 年 04 月 12 日 No.TC0017A,Revision 1,April 12,2001

修订记录/ Change Records

版次/Revision	相对上一版的修订记录 Change Record	备注 Remark
版次 1/Rev 1	首次发布。 Initial Issue	
版次 2/Rev 2	增加新型别: Z11(AC301A) Add a new model:Z11MB1(AC301A)	
版次 3/Rev 3	增加新型别: Z11M-100(AC311) Add a new model:Z11M-100(AC311)	
版次 4/Rev 4	1. 《Z11M-100型机飞行手册》(JZ-Z11M-100-D02)修改为《AC311直升机飞行手册》(适用于全静压系统A)(JZ-AC311-02-1)和《AC311直升机飞行手册》(适用于全静压系统B)(JZ-AC311-02-2) ; 《 Z11M-100 Rotorcraft Fight Manual 》(JZ-Z11M-100-D02) is changed to 《AC311 Rotorcraft Fight Manual》(For Pitot-Static system A) (JZ-AC311-02-1) and 《AC311 Rotorcraft Fight Manual》(For Pitot-Static system B) (JZ-AC311-02-2); 2. 《 Z11M-100 型机维护手册 - 适航性限制 》(JZ-Z11M-100-D04)改为《AC311直升机维护手册-适航性限制》(JZ-AC311-04)。 《 Z11M-100 Maintenance Manual-Instructions for Continued Airworthiness Limitations 》(JZ-Z11M-100-D04) changed to 《AC311 Maintenance Manual-Instructions for Continued Airworthiness Limitations》(JZ-AC311-04).	
版次 5/Rev 5	增加新型别: AC311A Add a new model:AC311A	

版次 6/Rev 6	1.按照新版《型号合格审定程序》（AP-21-AA-2023-11R1）对数据单格式进行调整，增加各型机扭矩限制、环境温度限制、运行限制等； According to 《Type Certification Procedures》（AP-21-AA-2023-11R1） to adjust the format of the data sheet, including increase torque limits, ambient temperature limit, operating limitations, etc. 2.燃油标准牌号“GB6537-2006”更改为“GB6537”； The Fuel standards number “GB6537-2006” is modified to“GB6537”； 3.设计更改引起数据单中AC311A直升机参数更新，如旋翼转速限制、重心范围、空速限制、最大高度等； The design changed causes the AC311A helicopter parameter updated in the data sheet, such as rotor speed limits,C.G. limits,airspeed limits, maximum altitude, etc. 4.相关文件的有效版次更新，如《AC311A直升机飞行手册》、《AC311A机载设备和零部件合格审定清单》和《AC311A直升机全机机载软件清单》等。 The versions of some documents are updated, such as 《AC311A Rotorcraft Flight Manual》, 《AC311A Airborne Equipment and Part Certification List》 and 《AC311A Airborne Software List》, etc.	
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