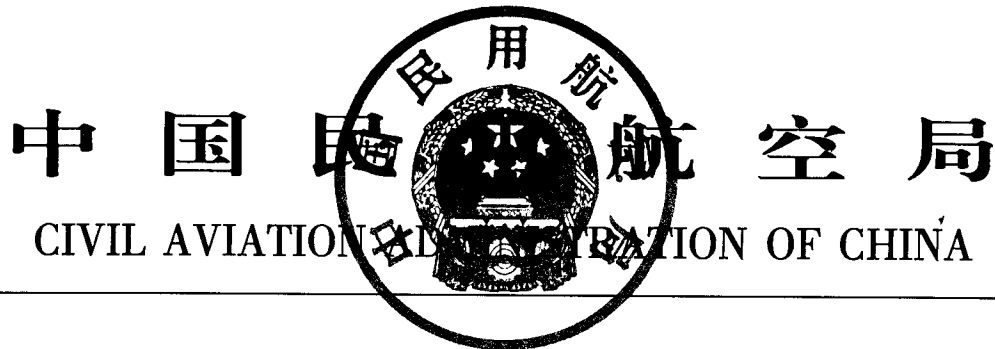




型号认可证

VALIDATION OF TYPE CERTIFICATE

编号/No. VTC0305A

本型号认可证颁发给/This Validation of Type Certificate is issued to
ALPHA AVIATION Concept Limited

产品名称/Product: 航空器/Aircraft 型号/Model: R2160,R2160i,R2120U

经中国民用航空局审查后确认,上述民用航空产品的设计符合中国民用航空规章的有关规定,中国民用航空局对由 新西兰民航局 颁发的第 A-15 号型号合格证/型号批准书给予认可,后附的该型号认可证数据单为 VTC0305A。

This certifies that the design of above civil aeronautical product meets applicable China Civil Aviation Regulations. Civil Aviation Administration of China validates the Type Certificate/Type Approval No. A-15 issued by CAA-ZEALAND. The Validation of Type Certificate Data Sheet No. VTC0305A is attached.

局长授权:

For the Administrator of CAAC:

签字/Signature

Yang Zhenmei

职务/Title

Deputy Director General

部门/Department

CAAC-AAD

日期/Date

2014-10-24

中 国 民 用 航 空 局
CIVIL AVIATION ADMINISTRATION OF CHINA

型号认可证数据单
Validation Type Certificate Data Sheet

编号/No: VTC0305A

版次/Revision: 0

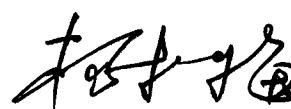
型号/Type:

R2160

R2160i

R2120U

批准人/Approved By: YANG ZHENMEI

职务/Title: Deputy Director
General of CAAC-AAD

日期/Date: 2014-10-24

本数据单是型号认可证(编号: VTC0305A)的组成部分, 它规定了符合中国民用航空局的适航要求所颁发此型号认可证的产品状态和限制。

This data sheet, which is part of Validation of Type Certificate (No: VTC0305A), prescribes condition and limitation under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

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

Alpha Aviation Concept Limited

59 Hautapu Road, RD1, Cambridge 3493
NEW ZEALAND

有效页清单/List of effective pages :

Pages	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Revision	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

第1部分 概述（所有机型）
SECTION 1 GENERAL (ALL MODELS)

1. CAAC认可数据单和型号合格证数据单**CAAC Validation Data Sheet and Type Certificate Data Sheet**

	中国民用航空局认可数据单号、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	VTC0305A , Rev. 0, 2014-10-24	TCDS CAANZ.A-15, Revision 5, 31 May, 2013
历史 History		

2. 类别/Category:

R2160 特技和实用类飞机/Acrobatc and Utility Categories Aircraft
R2160i 特技和实用类飞机/Acrobatc and Utility Categories Aircraft
R2120U 实用类飞机/ Utility Category Aircraft

3. 认可当局/Validation Authority:

中国民用航空局/CAAC

审定当局/Certifying Authority:

新西兰民航局/CAANZ

4. 型号合格证持有人/Type Certificate Holder:

Alpha Aviation Concept Limited
59 Hautapu Road, RD1, Cambridge 3493
NEW ZEALAND

5. 认可基础/Validation Basis:

CAAC的认可基础由CAANZ的审定基础和CAAC的附加技术条件组成。

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

6. CAAC附加技术条件/CAAC Additional Conditions

交付到中国的每一架R2160,R2160i和R2120U飞机须满足下述特殊要求/ Each of R2160,R2160i and/or R2120U aircraft delivered to China shall meet the following special requirements:

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

(2) 必须满足中国民用航空局的噪声要求CCAR-36-R1 dated 15, April 2007./The noise requirements of CAAC (i.e. CCAR-36-R1 dated 15, April 2007) must be met.

(3) 必须满足新西兰民用航空局颁发的所有适用于R2160,R2160i 和 R2120U飞机的适航指令要求。/ All Issued AD's against R2160,R2160i and R2120U by CAANZ must be met.

(4) 必须满足中国民用航空局规章CCAR-23-R3, §23.851灭火瓶的要求。/The requirement for CCAR-23-R3, §23.851. fire extinguishers must be met.

第2部分 SECTION 2

I - 型号 R2160 (特技和实用类) 1977 年 6 月 14 日获得批准/Model R2160 (Acrobatic and Utility categories) Approved 14.06.1977

<u>发动机/Engine:</u>	Lycoming O-320-D2A (E-274) 中国民航认证: VTC0294E CAAC Validation Type Certificate: VTC0294E
<u>燃油/Fuel:</u>	最低 100LL 航空汽油 100LL minimum aviation grade gasoline
<u>发动机限制/Engine Limits:</u>	对所有使用情况 2700 rpm (160 HP) 最大正常使用情况 2600 rpm (s/n 001 to 378) For all operations 2700 rpm (160 HP) Maximum normal operating rate 2600 rpm (s/n 001 to 378)
<u>螺旋桨/Propeller:</u>	Sensenich 74DM6S5-2-66 (P-886) (Serial numbers 01 to 378) or 74DM6S5-2-64 (All serial numbers) 中国民航认证: VTC0296P CAAC Validation Type Certificate: VTC0296P
<u>螺旋桨限制/Propeller Limits:</u>	最小静态 RPM @ 海平面 2150 直径 1.83 米 (72 英寸) 禁止减小 Minimum Static RPM @ sea level 2150 Diameter 1.83m (72") No reduction permitted
<u>空速限制/Airspeed Limits:</u>	
VNE 不可超越	178 节 (331 公里/小时) 指示空速
VNO 最大结构巡航	127 节 (236 公里/小时) 指示空速
VA 机动	127 节 (236 公里/小时) 指示空速
VFE 最大襟翼放下	97 节 (180 公里/小时) 指示空速
VNE Never exceed	178 kts (331 km/h) IAS
VNO Max. structural cruising	127 kts (236 km/h) IAS
VA Maneuvering	127 kts (236 km/h) IAS
VFE Max Flap Extended	97 kts (180 km/h) IAS
<u>设计限制载荷系数/Design Limit Load Factors</u>	
	特技类 (800 公斤最大总重量)
	襟翼 收起 +6
	-3

襟翼 放下	+2
	-0
实用类 (900 公斤最大总重量)	
襟翼 收起	+4.4
	-1.8
襟翼 放下	+2
	-0
Acrobatic (800 kg MAUW)	
Flaps up	+6
	-3
Flaps down	+2
	-0
Utility (900 kg MAUW)	
Flaps up	+4.4
	-1.8
Flaps down	+2
	-0

重心范围/C.G. Range:

特技类/Acrobatic

前向限制/Forward limit: 0.23 m @ 700 kgs (9.1" @ 1543 lbs)

中间限制/Intermediate limit: 0.33 m @ 800 kg (13" @ 1764 lbs).

后向限制/Aft Limit: 0.42 m @ 800 kg (16.5" @ 1764 lbs)

实用类/Utility

前向限制/Forward limit: 0.23 m @ 700 kgs (9.1" @ 1543 lbs)

中间限制/Intermediate limit: 0.33 m @ 900 kg (13" @ 1984 lbs).

后向限制/Aft Limit: 0.48 m @ 900 kg (18.9" @ 1984 lbs)

给定点之间直线变化

Straight line variation between points given.

空重的重心范围/Empty Weight C.G. Range: 无/None.

基准/Datum:

机翼前缘 5 号肋

Wing leading edge rib No. 5.

水平方式/Leveling means:

机身上部纵梁 (纵向) 和座椅靠背框架 (横向)

Fuselage upper longeron (longitudinal) and seat back frame (lateral).

最大重量/Maximum Weight:

特技类/Acrobatic

最大起飞/Maximum Take-off: 800 kgs (1764 lbs)

最大着陆/Maximum Landing: 800 kgs (1764 lbs)

实用类/Utility

最大起飞/Maximum Take-off: 900 kgs (1984 lbs)

最大着陆/Maximum Landing: 900 kgs (1984 lbs)

最小机组/Minimum Crew: 1/One座位数/Number of seats: 2 个在+0.46 米 (+18.1 英寸) 站位/Two at Station
+0.46 m (+ 18.1")最大行李/Maximum Baggage: 35 kg @ +1.21 m (+ 47.6"). 特技类禁止携带行李/None
permitted for acrobatics.燃油容量/Fuel Capacity: 全部: 120 升 (31.7 美加仑) (对序列号 001 到 378 的飞机为
标准容量)

可用: 118 升 (31 美加仑)

全部: 160 升 (42.2 美加仑) (对序列号 001 到 378 的飞机为
选装容量)可用: 158 升 (41.7 美加仑) (对序列号为 160A-06001 以上
的飞机为标准容量)Total: 120 litres (31.7 US gal) (Standard
for s/n 001 through 378)

Useable: 118 litres (31 US gal)

Total: 160 litres (42.2 US gal)
(Optional for s/n 001 through 378,Useable: 158 litres (41.7 US gal) (Standard
for s/n 160A-06001 up)滑油容量/Oil Capacity: 7.5 升 (8 美夸脱) /7.5 litres (8 US qts).操纵面位移/Control Surface Movements:

水平尾翼/Stabilator:	上/Up	10°±0.5°
	下/Down	12.5°± 0.5°
水平尾翼上调整片/Stabilator up tab:	上/Up	33.5°± 3°
	下/Down	5°± 3°
水平尾翼下调整片/Stabilator down tab:	上/Up	14°± 3°
	下/Down	22°± 3°
方向舵相对于垂直尾翼/Rudder relative to fin:	右/Right	30°± 2°
	左/Left	30°± 2°
副翼相对于机翼/Ailerons relative to wing:	上/Up	20°± 1.5°
	下/Down	15°± 1.5°
襟翼相对于机翼/Flaps relative to wing:	上/Up	0°
	起飞/Take-off	10°±
	着陆/Landing	35°± 2°

(见备注 8)

CAA 批准的飞行手册 AIR3001 (序列号 160A-06001 及以上)

CAA Approved Flight Manual AIR 2702 (Serial numbers 001 to 378)
(See Note 8)

CAA Approved Flight Manual AIR 3001 (Serial numbers 160A-06001 and up.)

图纸清单/Drawing List

图纸号 60-00-001 (序列号 160A-06001 及以上)

Drawing No 60-00-001 (Serial numbers 160A-06001 and up)

适用的序列号/Serial Numbers Eligible:

001 到 378 (见备注 5 和备注 6)

160A-06001 到 160A-07014, 160A-0015 及以上 (见备注 7)

001 through 378 (See Notes 5 and 6)

160A-06001 to 160A-07014, 160A-0015 and up (See Note 7)

II - 型号 R2160i (特技和实用类) 1998 年 7 月 8 日获得批准/Model R2160i (Acrobatic and Utility categories) Approved 08.07.1998

发动机/Engine:

Lycoming AEIO-320-D2B (1E12)

中国民航认可证: VTC0295E

CAAC Validation Type Certificate: VTC0295E

燃油/Fuel:

最低 100LL 航空汽油

100LL minimum aviation grade gasoline

发动机限制/Engine Limits:

对所有使用情况 2700 rpm (160 HP)

For all operations 2700 rpm (160 HP)

螺旋桨/Propeller:

Sensenich 74DM7S5-2-66 (P-886) (Serial numbers 01 to 378)

or 74DM7S5-2-64 (All serial numbers)

中国民航认可证: VTCVTC0296P

CAAC Validation Type Certificate: VTCVTC0296P

螺旋桨限制/Propeller Limits: 最小静态 RPM @ 海平面 2150

直径 1.83 米 (72 英寸) 禁止减小

Minimum Static RPM @ sea level 2150

Diameter 1.83m (72") No reduction permitted

空速限制/Airspeed Limits:

VNE 不可超越

178.5 节 (331 公里/小时) 指示空速

VNO 最大结构巡航

127 节 (236 公里/小时) 指示空速

VA	机动	127 节 (236 公里/小时) 指示空速
VFE	最大襟翼放下	97 节 (180 公里/小时) 指示空速
VNE	Never exceed	178.5 kts (331 km/h) IAS
VNO	Max. structural cruising	127 kts (236 km/h) IAS
VA	Maneuvering	127 kts (236 km/h) IAS
VFE	Max Flap Extended	97 kts (180 km/h) IAS

设计限制载荷系数/Design Limit Load Factors

特技类 (800 公斤最大总重量)

襟翼 收起 +6
-3襟翼 放下 +2
-0

实用类 (900 公斤最大总重量)

襟翼 收起 +4.4
-1.8襟翼 放下 +2
-0

Acrobatic (800 kg MAUW)

Flaps up +6
-3Flaps down +2
-0

Utility (900 kg MAUW)

Flaps up +4.4
-1.8Flaps down +2
-0重心范围/C.G. Range:特技类/**Acrobatic**

前向限制/Forward limit: 0.23 m @ 700 kgs (9.1" @ 1543 lbs)

中间限制/Intermediate limit: 0.33 m @ 800 kg (13" @ 1764 lbs).

后向限制/Aft Limit: 0.42 m @ 800 kg (16.5" @ 1764 lbs)

实用类/**Utility**

前向限制/Forward limit: 0.23 m @ 700 kgs (9.1" @ 1543 lbs)

中间限制/Intermediate limit: 0.33 m @ 900 kg (13" @ 1984 lbs).

后向限制/Aft Limit: 0.48 m @ 900 kg (18.9" @ 1984 lbs)

给定点之间直线变化

Straight line variation between points given.

空重的重心范围/Empty Weight C.G. Range: 无/None.

基准/Datum:

机翼前缘 5 号肋

Wing leading edge rib No. 5.

水平方式/Leveling means:

机身上部纵梁（纵向）和座椅靠背框架（横向）

Fuselage upper longeron (longitudinal) and seat back frame (lateral).

最大重量/Maximum Weight:

特技类/**Acrobatic**

最大起飞/Maximum Take-off: 800 kgs (1764 lbs)

最大着陆/Maximum Landing: 800 kgs (1764 lbs)

实用类/**Utility**

最大起飞/Maximum Take-off: 900 kgs (1984 lbs)

最大着陆/Maximum Landing: 900 kgs (1984 lbs)

最小机组/Minimum Crew:

1/One

座位数/Number of seats:

2 个在 +0.46 米 (+18.1 英寸) 站位/Two at Station +0.46 m (+ 18.1")

最大行李/Maximum Baggage:

35 kg @ +1.21 m (+ 47.6"). 特技类禁止携带行李/None permitted for acrobatics.

燃油容量/Fuel Capacity:

全部: 120 升 (31.7 美加仑) (对序列号 001 到 378 的飞机为标准容量)

可用: 118 升 (31 美加仑)

全部: 160 升 (42.2 美加仑) (对序列号 001 到 378 的飞机为选装容量)

可用: 158 升 (41.7 美加仑) (对序列号为 160Ai-07007 及以上的飞机为标准容量)

Total: 120 litres (31.7 US gal) (Standard for s/n 001 through 378)

Useable: 118 litres (31 US gal)

Total: 160 litres (42.2 US gal) (Optional for s/n 001 through 378,

Useable: 158 litres (41.7 US gal) (Standard s/n 160Ai-07007 and up)

滑油容量/Oil Capacity: 7.5 升 (8 美夸脱) / 7.5 litres (8 US qts).

操纵面位移/Control Surface Movements:

水平尾翼/Stabilator:

上/Up

10°±0.5°

下/Down

12.5°± 0.5°

水平尾翼上调整片/Stabilator up tab:	上/Up	33.5°± 3°
	下/Down	5°± 3°
水平尾翼下调整片/Stabilator down tab:	上/Up	14°± 3°
	下/Down	22°± 3°
方向舵相对于垂直尾翼/Rudder relative to fin:	右/Right	30°± 2°
	左/Left	30°± 2°
副翼相对于机翼/Ailerons relative to wing:	上/Up	20°± 1.5°
	下/Down	15°± 1.5°
襟翼相对于机翼/Flaps relative to wing:	上/Up	0°
	起飞/Take-off	10°±
	着陆/Landing	35°± 2°

飞行手册/Flight Manual

CAA 批准的飞行手册 AIR2846 (序列号 001 到 378) (见备注 8)

CAA 批准的飞行手册 AIR3002 (序列号 160Ai-07007 及以上)

CAA Approved Flight Manual AIR 2846 (Serial numbers 001 to 378) (See Note 8)

CAA Approved Flight Manual AIR 3002 (Serial numbers 160Ai-07007 and up.)

图纸清单/Drawing List

图纸号 60-00-001 (序列号 160Ai-07007 及以上)

Drawing No 60-00-001 (Serial numbers 160Ai-07007 and up)

适用的序列号/Serial Numbers Eligible:

001 到 378 (见备注 5 和备注 6)

160Ai-07007, 160Ai-0008 及以上 (见备注 7)

001 through 378 (See Notes 5 and 6)

160Ai-07007, 160Ai-0008 and up (See Note 7)

III - 型号 R2120U (实用类) 2001 年 5 月 18 日获得批准/ Model R2120U (Utility category)
Approved 18.05.2001

<u>发动机/Engine:</u>	Lycoming O-235-L2A (E-223)
	中国民航认证: VTC0293E
	CAAC Validation Type Certificate: VTC0293E
<u>燃油/Fuel:</u>	最低 100LL 航空汽油
	100LL minimum aviation grade gasoline
<u>发动机限制/Engine Limits:</u>	对所有使用情况 2800 rpm (118 HP)
	For all operations 2800 rpm (118 HP)
<u>螺旋桨/Propeller:</u>	Sensenich: 72CKS6-0-54 (P-904)
	中国民航认证: VTC0183P
	CAAC Validation Type Certificate: VTC0183P

螺旋桨限制/Propeller Limits: 最小静态转速 @ 海平面 2300

直径 1.83 米 (72 英寸) 禁止减小

Minimum Static RPM @ sea level 2300

Diameter 1.83m (72") No reduction permitted

空速限制/Airspeed Limits:

VNE 不可超越 156.5 节 (290 公里/小时) 指示空速

VNO 最大结构巡航 127 节 (236 公里/小时) 指示空速

VA 机动 127 节 (236 公里/小时) 指示空速

VFE 最大襟翼放下 97 节 (180 公里/小时) 指示空速

VNE Never exceed 156.5 kts (290 km/h) IAS

VNO Max. structural cruising 127 kts (236 km/h) IAS

VA Maneuvering 127 kts (236 km/h) IAS

VFE Max Flap Extended 97 kts (180 km/h) IAS

设计限制载荷系数/Design Limit Load Factors

襟翼 收起 +4.4

-1.8

襟翼 放下 +2

-0

Flaps up +4.4

-1.8

Flaps down +2

-0

重心范围/C.G. Range:

前向限制/Forward limit: 0.28 m @ 700 kgs (11" @ 1543 lbs)

中间限制/Intermediate limit: 0.38 m @ 800 kg (15" @ 1764 lbs).

后向限制/Aft Limit: 0.44 m @ 800 kg (17.3" @ 1764 lbs)

给定点之间直线变化

Straight line variation between points given.

空重的重心范围/Empty Weight C.G. Range: 无/None.

基准/Datum:

机翼前缘 5 号肋

Wing leading edge rib No. 5.

水平方式/Leveling means:

机身上部纵梁 (纵向) 和座椅靠背框架 (横向)

Fuselage upper longeron (longitudinal) and seat back frame (lateral).

最大重量/Maximum Weight:

最大起飞/Maximum Take-off: 800 kgs (1764 lbs)

最大着陆/Maximum Landing: 800 kgs (1764 lbs)

最小机组/Minimum Crew: 1/One

座位数/Number of seats: 2 个在+0.46 米 (+18.1 英寸) 站位/Two at Station +0.46 m (+ 18.1")

最大行李/Maximum Baggage: 35 kg @ +1.21 m (+ 47.6"). 特技类禁止携带行李/None permitted for acrobatics.

燃油容量/Fuel Capacity: 全部: 120 升 (31.7 美加仑)

可用: 118 升 (31 美加仑)

Total: 120 litres (31.7 US gal)

Useable: 118 litres (31 US gal)

滑油容量/Oil Capacity: 5.7 升 (6 美夸脱) /5.7 litres (6 US qts).

操纵面位移/Control Surface Movements:

水平尾翼/Stabilator:	上/Up	10°±0.5°
	下/Down	12.5°± 0.5°
水平尾翼上调整片/Stabilator up tab:	上/Up	33.5°± 3°
	下/Down	5°± 3°
水平尾翼下调整片/Stabilator down tab:	上/Up	14°± 3°
	下/Down	22°± 3°
方向舵相对于垂直尾翼/Rudder relative to fin:	右/Right	30°± 2°
	左/Left	30°± 2°
副翼相对于机翼/Ailerons relative to wing:	上/Up	20°± 1.5°
	下/Down	15°± 1.5°
襟翼相对于机翼/Flaps relative to wing:	上/Up	0°
	起飞/Take-off	10°±
	着陆/Landing	35°± 2°

飞行手册/Flight Manual

CAA 批准的飞行手册 AIR2748 (序列号 001 到 378) (见备注 8)

CAA 批准的飞行手册 AIR3000 (序列号 120T-0001 及以上)

CAA Approved Flight Manual AIR 2748 (Serial numbers 001 to 378) (See Note 8)

CAA Approved Flight Manual AIR 3000 (Serial numbers 120T-0001 and up.)

图纸清单/Drawing List

图纸号 20-00-001 (序列号 120T-0001 及以上)

Drawing No 20-00-001 (Serial numbers 120T-0001 and up)

适用的序列号/Serial Numbers Eligible:

001 到 378 (见备注 5)

120T-0001 及以上 (见备注 7)

001 through 378 (See Notes 5)

120T-0001 and up (See Note 7)

与所有飞机相关的数据/DATA PERTINENT TO ALL AIRCRAFT

认可基础/Validation Basis:

CAAC 的认可基础由 CAANZ 的审定基础和 CAAC 的附加技术条件组成。

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

审定基础/Certification Basis:

2006 年 6 月前制造的飞机

1965 年 2 月 1 日生效的 FAR23 部, 以及从 23-1 修正案到 1970 年 6 月 17 日生效的 23-9 修正案。

AIR 2052A 中 3.397 和 3.399 段的补充技术要求。

特殊技术要求: “前滑动座舱盖必须是可抛放的”。

2006 年 6 月后制造的飞机

i) 对于基本型飞机:

1965 年 2 月 1 日生效的 FAR23 部, 以及从 23-1 修正案到 1970 年 6 月 17 日生效的 23-9 修正案。

1969 年 12 月 1 日生效的 FAR36 部, 以及从 36-1 修正案到 1978 年 4 月 3 日生效的 36-9 修正案。

AIR 2052A 中 3.397 和 3.399 段的补充技术要求。

特殊技术要求: “前滑动座舱盖必须是可抛放的”。

ii) 对于 2006 年 6 月后批准的型别, 和 2006 年 6 月后批准的重大设计更改。

1965 年 2 月 1 日生效的 FAR23 部, 以及从 23-1 修正案到 2002 年 3 月 1 日生效的 23-55 修正案。

1969 年 12 月 1 日生效的 FAR36 部, 以及从 36-1 修正案到 2002 年 8 月 7 日生效的 36-24 修正案。

AIR 2052A 中 3.397 和 3.399 段的补充技术要求。

特殊技术要求: “前滑动座舱盖必须是可抛放的”。

Aircraft manufactured prior to June 2006:

Federal Aviation Regulations Part 23 dated 1 February 1965 as amended by amendment 23-1 through 23-9 dated 17 June 1970.

Supplementary technical requirements from AIR 2052A paragraphs 3.397 and 3.399.

Special technical requirement: “Forward sliding canopy must be jettisonable”.

Aircraft manufactured after June 2006:

i) For the basic aircraft:

Federal Aviation Regulations Part 23 dated 1 February 1965 as amended by amendment 23-1 through 23-9 dated 17 June 1970.

Federal Aviation Regulations Part 36 dated 1 December 1969 as amended by amendment 36-1 through 36-9 dated 3 April 1978.

Supplementary technical requirements from AIR 2052A paragraphs 3.397 and 3.399.

Special technical requirement: "Forward sliding canopy must be jettisonable".

ii) For models approved after June 2006, and significant major design changes approved after June 2006:

Federal Aviation Regulations Part 23 dated 1 February 1965 as amended by amendment 23-1 through 23-55 dated 1 March 2002.

Federal Aviation Regulations Part 36 dated 1 December 1969 as amended by amendment 36-1 through 36-24 dated 7 August 2002.

Supplementary technical requirements from AIR 2052A paragraphs 3.397 and 3.399.

Special technical requirement: "Forward sliding canopy must be jettisonable".

设备/Equipment:

适用的适航规章(见审定基础)中规定的基本要求设备必须安装在适航审定的飞机上。

要求向所有的运行提供适用的 CAA 批准的飞行手册。包括在飞行手册中以补充的方式提供的信息,涵盖飞机的安全运行所需的可选系统和设备的安装。

The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in the aircraft for airworthiness certification.

The applicable CAA approved Flight Manual is required for all operations. Included within the Flight Manual is information in the form of supplements which cover installation of optional systems and equipment that are necessary for safe operation of the aircraft.

CAAC 附加技术条件/CAAC Additional Conditions

交付到中国的每一架 R2160,R2160i 和 R2120U 飞机须满足下述特殊要求/ Each of R2160,R2160i and/or R2120U aircraft delivered to China shall meet the following special requirements:

- (1) 必须满足中国民用航空局的运行要求（例如标记标牌的中文要求）。/ The operational requirements of CAAC must be met (e.g. Chinese language requirements for markings and placards).
- (2) 必须满足中国民用航空局的噪声要求 CCAR-36-R1 dated 15, April 2007./The noise requirements of CAAC (i.e. CCAR-36-R1 dated 15, April 2007) must be met.
- (3) 必须满足新西兰民用航空局颁发的所有适用于 R2160,R2160i 和 R2120U 飞机的适航指令要求。/ All Issued AD's against R2160,R2160i and R2120U by CAANZ must be met.
- (4) 必须满足中国民用航空局规章 CCAR-23-R3, §23.851 灭火瓶的要求。/The requirement for CCAR-23-R3, §23.851. fire extinguishers must be met.

备注 1/NOTE 1 在初始颁发适航证及之后，必须为每架飞机提供有效的重量和平衡报告，包括审定空重中包括的设备列表。在适用的 CAA 批准的飞行手册中包含装载说明。Current weight and balance report, including list of equipment included in certified empty weight must be provided for each aircraft at the time of original airworthiness certification and at all times thereafter. Loading instructions are included in the applicable CAA approved Flight Manual.

备注 2/NOTE 2 (a) 标牌和仪表标记必须按照适用的 CAA 批准的飞行手册，包括相关增补来设置和展示。

(b) 每架飞机必须有驾驶员清晰可见的标牌，规定飞机由安装设备限制的运行种类，例如白天 VFR 或夜间 VFR，以及禁止在已知结冰条件下运行。

(a) Placards and instrument markings must be displayed in accordance with the applicable CAA approved Flight Manual including relevant supplements.

(b) Each aircraft must have a placard in clear view of the pilot that specifies the kind of operations such as VFR DAY or VFR NIGHT, to which the operation of the aircraft is limited by the equipment installed, and also that flight in known icing conditions is prohibited.

备注 3/NOTE 3 飞机的持续适航文件包含在：

序列号从 160A-06001 及以上飞机的阿尔法航空 R2000 服务手册。时寿件和翼梁连接部位的检查要求在手册第 3 节，“时间限制和维修说明”中列出。

Instructions for continuing airworthiness of the aircraft are contained in:

Alpha Aviation Service Manual for the R2000 series s/n 160A-06001 and up. Service Life limits of components and wing spar connection inspection are given in Section 3, Time Limits & Maintenance Instructions.

备注 4/NOTE 4 CAANZ 型号证书以 EASA 的 70 号型号合格证为基础颁发，EASA 的 70 号型号合格证已被转让到新西兰并由进口型号合格证 EASA.IM.A.086 代替。到序列号 378 的飞机在 EASA 的 70 号型号合格证下由 Apex 航空有限公司或其以前的公司制造。一些 R2160 型号的飞机在加拿大型号合格证 A-125 下由 Avions Pierre Robins 公司在加拿大组装，本型号合格证包括这些飞机。

The CAANZ Type Certificate is issued on the basis of EASA Type Certificate No 70 which has been transferred to New

Zealand, and replaced by import Type Certificate EASA.IM.A.086. Aircraft up to serial number 378 were produced under EASA Type Certificate No 70 by Apex Aviation Ltd or their predecessor companies. A number of R2160 model aircraft were assembled in Canada by Avions Pierre Robins Inc under Canadian Type Certificate A-125 and are covered by this Type Certificate.

备注 5/NOTE 5 法国制造厂（包括加拿大组装的例子）颁发的序列号不考虑型号，按顺序排号。

Serial numbers issued by the French manufacturer (including Canadian assembled examples) were sequential regardless of model.

备注 6/NOTE 6 在加拿大组装的飞机可能在基本序列号前加 C。

Aircraft assembled in Canada may have a C in front of the basic serial number.

备注 7/NOTE 7 序列号从 160A-06001 到 160A-0018, 从 120T-0001 到 120T-0002, 和 160Ai-07007 160Ai-0008 的飞机在 2006 年 6 月到 2008 年 6 月期间由阿尔法航空制造有限公司依据 148 部飞机制造组织证书 AM66328 生产。

对于序列号从 160A-06001 到 160A-07014, 和 160Ai-07007 的飞机, 适用下面的格式:

XXXX-XXXXX

第一个序列规定型别。

160A = R2160

160Ai = R2160i

120T = R2120U

第二个序列的 5 个数字描述生产年份（前 2 位）和生产序列号（后 3 位），生产序列号是连续的，不考虑型别。

对 160A-0015 及以上, 160Ai-0008 及以上, 和 120T-0001 及以上的序列号删除生产年份, 并且每个型别的数字是连续的

阿尔法航空制造有限公司 2010 年 7 月后依据 148 部飞机制造组织证书 AM75991 生产序列号 160A-0019 及以上, 120T-0003 及以上, 和 160Ai-0009 及以上的飞机。

Aircraft serial numbers 160A-06001 through 160A-0018, 120T-0001 and 120T-0002, and 160Ai-07007 160Ai-0008 were manufactured by Alpha Aviation Manufacturing Ltd under Part 148 aircraft manufacturing organisation certificate AM66328 between June 2006 and June 2008.

For serial numbers 160A-06001 through 160A-07014, and 160Ai-07007 the following format was used:

XXXX-XXXXX

The first sequence defines the Model.

160A = R2160

160Ai = R2160i

120T = R2120U

The second sequence of five numbers describes the production year (first 2 digits) and the production serial number (final three digits) which is sequential regardless of model. For serial numbers 160A-0015 and up, 160Ai-0008 and up, and 120T-0001 and up, the production year is deleted from the serial number, and the numbers are sequential for each model. Aircraft serial numbers 160A-0019 and up, 120T-0003 and up, and 160Ai-0009 and up are manufactured by Alpha Aviation Manufacturing Ltd under Part 148 aircraft manufacturing organisation certificate AM75991 after July 2010.

备注 8/NOTE 8 在法国注册的飞机可以继续使用在 2006 年 3 月生效的 Apex 飞机服务信函 No 6 第 18 修订中规定的适用的法文版飞行手册。

Aircraft registered in France may continue to use the applicable French language Flight Manual specified in Apex Aircraft Service Letter No 6 Revision 18 dated March 2006.

备注 9/NOTE 9 中文标牌和标识包含在飞机飞行手册补充 AA/60/1120 rev.1 或 CAAC 批准的后续版本中。

Chinese markings and placards are included in AFM supplement AA/60/1120 rev.1 or later revisions CAAC approved.

结束/END