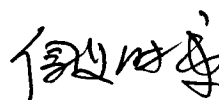


中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No: VTC0277A
版次/Revision: 0
型号/Type: Kodiak 100
批准人/Approved By:



日期/Date: 2013 年 7 月 19 日

本数据单是型号认可证(编号: VTC0277A)的组成部分, 它规定了符合中国民用航空局适航要求所颁发此型号认可证的产品状态和限制。(见备注 1)

This Data Sheet which is part of Type Certificate(No. VTC0277A) prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation. (See Note 1)

型号认可证持有人/Validation of Type Certificate Holder:
Quest Aircraft Design, LLC
1200 Turbine Drive Sandpoint, Idaho 83864, USA.

有效页清单/List of effective pages :

页数/ Pages	1	2	3	4	5	6	7
版次/Revision	0	0	0	0	0	0	0

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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	VTC0277A, Rev 0, 2013.7.19	No.A00007SE, Rev 17, May13 2013

2. 认可当局/Validation Authority: 中国民用航空局/CAAC
审定当局/Certifying Authority: 美国联邦航空局/FAA

3. 型号合格证持有人/Type Certificate Holder: Quest Aircraft Design, LLC
1200 Turbine Drive Sandpoint, Idaho 83864, USA.

4. 进口要求/Import Requirements

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

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

第 2 部分/SECTION 2: Kodiak 100

I. 总则/General

1. 衍生型或型别/Variant or Model: Kodiak100
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: Quest Aircraft Design, LLC
1200 Turbine Drive Sandpoint, Idaho 83864, USA.
2. FAA 批准日期/FAA Approved Date: 2007.05.30/May.30, 2007
3. CAAC 批准日期/CAAC Approved Date: 2013.7.19/July 19, 2013

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

发动机/Engines: 一台普惠 PT6A-34 发动机 (FAA 发动机型号合格证编号: E4EA, 型号认可证编号 VTC0171E)
1 Pratt and Whitney PT6A-34 Engines (FAA Engine Type Certificate No. E4EA, Validation Type Certificate No. VTC0171E).

燃油/Fuel: 主用燃油/Primary Fuel: Jet A
替代燃油/Alternate Fuels: Jet A-1, JP-1, JP-5, JP-8, No.3 Jet Fuel(中国/CHINA)
注: 所有燃油必须满足加拿大普惠 CPW204 规范
/Note: that all fuels must conform to Pratt and Whitney Canada Specification CPW204.

发动机限制/Engine Limits:
最大起飞推力/Maximum Takeoff Power: 750 马力, 2000 转每分钟, 取决于环境温度和压力条件。/750 horsepower at 2,200 rpm, subject to ambient temperature and pressure conditions.
更多细节和限制参见最新批准的 Kodiak100“飞行员操作手册和 FAA 批准的飞行手册”以及发动机厂 TC 数据单 E4EA。/ See the latest approved revision of the KODIAK 100 “Pilots Operating Handbook and FAA Approved Flight Manual” and Engine TC Data Sheet E4EA for additional details and limitations.

螺旋桨和螺旋桨限制/Propeller Limits:
螺旋桨生产厂/Propeller Manufacturer: Hartzell
数量/ Number of Propellers: 1/One
螺旋桨 TC 号、Propeller TC Number: P10NE
型号认可书: VTC0203P
螺旋桨型号/Propeller Model Designation: HC-E4N-3P (Y) /D9511FSB
直径限制/ Diameter Limits: 最小95”, 最大96”, 不允许有超差。
/95" minimum, 96" maximum; no further tolerance permitted
高桨叶角/High Pitch Angle: $86.1^{\circ} \pm 0.5^{\circ}$
低桨叶角/Low Pitch Angle: $17.5^{\circ} \pm 0.5^{\circ}$
反桨叶角/ Reverse Pitch Angle: $-10.0^{\circ} \pm 0.5^{\circ}$
静转限制/ Static RPM Limits: 禁止从450转/分到1050转/分的稳定地面运行
/ Stabilized ground operation prohibited from between 450 rpm and 1,050 rpm
桨叶角限制在径向30”内, 更多细节和限制参见螺旋桨型号合格证数据单P10NE。
/ Pitch angle limits to be measured at 30" radial distance. See Propeller TC Data Sheet P10NE for additional details and Limitations.

空速限制/Airspeed Limits:
VO: 143 kcas (142 kias)
VFE (10°): 139 kcas (138 kias)
VFE (20°): 120 kcas (120 kias)
VFE (35°): 108 kcas (108 kias)
VMO: 180 kcas (182 kias)

重心范围/Center of Gravity (C.G.) Range, 见备注 2/See NOTE2:

序列号 100-001 到 0034,但满足 Quest 服务通告 SN-025 的除外:

/Serial Numbers 100-0001 thru 100-0034 without Quest Service Notice SN-025 compliance :

后限: 基点后 80.8 英寸(3620 磅到 6750 磅)

/Aft Limits: 80.8" aft of datum (3,620 lb to 6,750 lb)

前限: 基点后 63.9 英寸(3620 磅到 5000 磅)

Forward Limits: 63.9" aft of datum (3,620 lb to 5,000 lb)

基点后 69.4 英寸(5000 磅到 6750 磅)

69.4" aft of datum (5,000 lb to 6,750 lb)

两点之间线性变化。

Straight-line variation between points.

序列号 100-035 以后,包含 100-001 到 100-034 中满足 Quest 服务通告 SN-025 的飞机:

/Serial Numbers 100-0035 and above and Serial Numbers 100-0001 thru 100-0034 with Quest Service Notice SN-025 compliance:

后限: 基点后 80.8 英寸(4070 磅到 7255 磅)

Aft Limits: 80.8" aft of datum (4,070 lb to 7,255 lb)

前限: 基点后 63.9 英寸(4070 磅到 5000 磅)

Forward Limits: 63.9" aft of datum (4,070 lb to 5,000 lb)

基点后 71.0 英寸(5000 磅到 7255 磅)

71.0" aft of datum (5,000 lb to 7,255 lb)

两点之间线性变化。

Straight-line variation between points.

基准/Datum:

防火墙的前面为 0.0 英寸基点

/The forward face of the firewall represents datum 0.0 inches

水平测量方法/ Leveling Means:

水平仪安放在后部座舱靠近货舱门前方的座椅轨道上。

如需更多细节, 参见最新批准的Kodiak100“飞行员操作手册和FAA批准的飞行手册”

Place a level on the seat tracks in the aft cabin next to the cargo door forward post.

See the latest approved revision of the KODIAK 100 “Pilots Operating Handbook and FAA

Approved Flight Manual” for additional details.

最大重量(正常使用重量)/ Maximum Weights(Normal Operating Weight) :

序列号100-001到100-0034,且不满足Quest服务通告SN-025的飞机

/Serial Numbers 100-0001 thru 100-0034 without Quest Service Notice SN-025:

最大停机坪/Maximum Ramp: 6800磅/lb

最大着陆/Maximum Landing: 6690磅/lb

最大起飞/Maximum Takeoff: 6750磅/lb

设计最小飞行重量/Design Minimum Flying Weight: 3620磅/lb

序列号100-035及其以后,以及包含100-001到100-034中满足Quest服务通告SN-025的飞机:

/Serial Numbers 100-0035 and above and Serial Numbers 100-0001 thru 100-0034 with Quest Service Notice SN-025 compliance

最大停机坪/Maximum Ramp: 7305磅/lb

最大着陆/Maximum Landing: 6690磅/lb

最大起飞Maximum Takeoff: 7255磅/lb

最大零燃油、Zero-Fuel: 6490磅/lb

设计最小飞行重量/Design Minimum Flying Weight: 4070 磅/lb

最小机组/ Minimum Crew:

1 名飞行员/1 Pilot

座位数量/Number of Seats:

最多10个座位, 包括安装于基点后40英寸的2个座位和依据最新批准的Kodiak100

“飞行员操作手册和FAA批准的飞行手册”确定位置的8个座位。

/Up to 10 seats total, including 2 seats located at 40" aft of datum and up to 8 additional seats located in accordance with latest approved revision of the KODIAK 100 “Pilots Operating Handbook and FAA Approved Flight Manual”

最大机舱重量/Maximum Compartment Weights:

在最新批准的Kodiak 100“飞行员操作手册和FAA批准的飞行手册”中定义。

/As defined in latest approved revision of the KODIAK 100 “Pilots Operating Handbook and FAA Approved Flight Manual”

燃油容量(lbs)/ Fuel Capacity (lbs)

每个大翼上基点后83.4英寸处安装1个160加仑的油箱，其中157.5加仑可用，2.5加仑不可用（共320加仑，315加仑可用，5加仑不可用）。

/One 160 gallon tank in each wing at 83.4" aft of datum; 157.5 gallons usable, 2.5 gallons unusable (320 gallons total; 315 gallons usable, 5 gallons unusable)

注意：不可用燃油重量已加到合格审定空机重量中。

Note: add weight of unusable fuel to the certificated empty weight.

滑油容量/ Oil Capacity:

基点前18.9英寸处13夸脱，其中9夸脱可排放，4夸脱不可排放。

/13 qt total at 18.9" forward of datum; 9 qt drainable, 4 qt undrainable

参见加拿大普惠1001号服务通告查阅批准的滑油

/See Pratt and Whitney Canada Service Bulletin Number 1001 for approved oil.

注意：不可用滑油重量已加到合格审定空机重量中。

Note: add weight of unusable oil to the certificated empty weight.

最大运行高度/Maximum Operating Altitude:

没有安装 FAA 批准的供氧系统时，14000 英尺

/14,000 feet without FAA approved oxygen system installed;

安装 FAA 批准的供氧系统时，25000 英尺。

/25,000 feet with FAA approved oxygen system installed.

操纵面偏度/Control Surface Movements:

襟翼/Wing Flaps: 0°, 10°+1°/-2°, 20°±2, 35°±2°

副翼/Ailerons: 上/Up: 28°±1° 下/Down: 15°±1°

副翼配平/Aileron Trim Tab: 上/Up: 30°±2° 下/Down: 30°±2°

升降舵/Elevator: 上/Up: 30°±1° 下/Down: 22°±1°

升降舵配平/Elevator trim tab: 上/Up: 15°±2° 下/Down: 12°±1°

方向舵/Rudder: 右/Right: 26°±1° 左/Left: 26°±1°

襟翼校装说明和襟翼0°构形的设定，见FAA最新批准的Kodiak 100“飞机维护手册或其他FAA批准资料。

/See the latest FAA approved revision of the KODIAK 100 “Airplane Maintenance Manual”, or other FAA approved data, for flap rigging instructions and setting Flaps up (0°) configuration.

FAA审定基础/FAA Certification Basis:

TC 颁发时: FAR 23 部 (1965 年 2 月 1 日生效)，包括第 23-1 至第 23-55 修正案; FAR 34 部至 34-3 修正案; FAR 36 部至 36-28 修正案。

At TC Issuance: Part 23 of the Federal Aviation Regulations (FAR) effective February 1, 1965, as amended by 23-1 through 23-55; FAR 34 as amended through 34-3, and FAR 36 as amended through 36-28.

目前/Current: 未改变/Unchanged

专用技术条件: HIRF(高强度辐射域)特殊条件 23-207-SC, 2007 年 1 月 31 日生效。

Special Conditions: Special Condition 23-207-SC for high intensity radiated fields (HIRF) protection, effective January 31, 2007.

TC 号/TC Number: A00007SE

TC 颁发日期/TC Issuance Date: 2007 年 5 月 30 日/May 30, 2007

TC 申请日期/TC Application Date: 2005 年 4 月 7 日/April 7, 2005

运行限制条件: 可昼夜、目视和仪表飞行。

如按照 FAA 批准的最新版 KODIAK 100 飞行员操作手册 (POH) /飞行手册 (AFM) 安装了 “TKS 防冰系统”，则允许进入已知结冰区域。此加装可以在飞机生产过程中完成（可能要求系统满足 QUEST 服务通告 SN-043 的要求）或者依据经过 FAA 批准的最新版 QUEST 外场服务指令 FSI-013 来完成安装。序列号 100-0001 至 100-0017 未满足 QUEST 服务通报 SB-016 的飞

机最低运行外层大气温度为-25℃。序列号 100-0018 及以上和 100-001 至 100-0017 中满足 QUEST 服务通报 SB-016 的飞机最低运行外层大气温度为-55℃。
/Operational Restrictions: Day-Night, Visual Flight Rules (VFR) and Instrument Flight Rules (IFR). Flight into known icing conditions allowed when the required equipment listed in the latest FAA approved revision of the KODIAK 100 POH/AFM “TKS Ice Protection System” supplement is installed; installation may have been accomplished when the airplane was produced (may have required system activation in accordance with Quest Service Notice N-043), or may have been installed in accordance with the latest FAA approved revision of Quest Field Service Instruction FSI-013. Minimum Operating OAT -25℃ for Serial Numbers 100-0001 thru 100-0017 without Quest Service Bulletin SB-016 compliance. Minimum Operating OAT -55℃ for Serial numbers 100-0018 and above and Serial Numbers 100-0001 thru 100-0017 with Quest Service Bulletin SB-016 compliance.

CAAC认可审定基础/CAAC Validation Certification Basis

CAAC 的认可审定基础由 FAA 的审定基础和 CAAC 附加技术条件组成。
The CAAC validation basis consists of the FAA certification basis and the CAAC additional technical conditions.

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

(1) 必须确定符合“GB6537-2006 3 号喷气燃料”规范的燃料是可接受的;
The acceptance of fuel conforming to the Specification GB6537-2006 “No.3 Jet Fuel” must be defined;
(2) 根据 CCAR21.29(5), 机上所有对旅客进行的提示、警告和通知的文字标记和标牌; 机上所有向旅客或机外营救人员指示应急出口和门的位置以及开启方法的文字标记和标牌; 旅客可能使用的机上所有应急设备的操作、使用说明应当至少有简体中文表述。

Per CCAR 21.29(5), all on-board placards and markings for awareness, warning, and note to the passengers; all on-board placard and markings for opening method and location indication of the emergency exit and door to passenger and outside rescuer; and all operational instructions for on-board emergency equipments possible operated by passengers shall be presented in Simplified Chinese at least.

生产基础/Production Basis,见备注5/See NOTE5: .

生产许可证/Production Certificate 728NM

生产厂序列号/Manufacturer's Serial Numbers:

本数据单包含的信息适合序列号100-0001及以上。

The information contained herein is applicable to Serial Numbers 100-0001 and greater.

设备/Equipment:

为取得适航证, 适用适航规章(参见审定基础)要求设备必须安装于飞机上。

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

合格审定必须的其它装设备: 参见 FAA 最新批准的 Kodiak100“飞行员操作手册和 FAA 批准的飞行手册”。

/Additional Equipment Necessary for Type Certification: The latest FAA Approved Revision of the KODIAK 100 “Pilots Operating Handbook and FAA Approved Flight Manual.”

IV. 注释/Notes

备注 1: 飞机定义见型号合格证 FAA 型号认可证 A00007SE

/NOTE 1: Aircraft definition for FAA Type Certificate A00007SE

备注2: 在每架飞机初始审定时, 应提供一份现行的重量和平衡报告, 包括在审定空重中包含的设备的清单, 以及装载指南(必要时)。

/NOTE2: A current weight and balance report, including a list of equipment included in the certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification.

备注 3: FAA 批准的最新版本 Kodiak100“飞行员操作手册和 FAA 批准的飞行手册”中规定的标牌必须具备。

/NOTE3: The placards specified in the latest FAA approved revision of the KODIAK 100 “Pilots Operating Handbook and FAA Approved Flight Manual” are required.

备注 4: 飞机必须按照经 FAA 批准的最新版本 Kodiak100“飞机维护手册”或其他 FAA 批准资料中的持续适航指令、适航限制章节进行维护后续。

/NOTE 4: The airplane must be subsequently maintained in accordance with the Instructions for Continued Airworthiness,

and Airworthiness Limitations section, as contained in the latest FAA approved revision of the KODIAK 100 *"Airplane Maintenance Manual"*, or other FAA approved data.

备注 5: 必须按照 FAA 最新批准的 KODIAK 100“主图纸清单”或其它 FAA 批准资料进行飞机的生产制造。

NOTE 5: The airplane shall be manufactured in accordance with the latest FAA approved revision of the KODIAK 100 *"Master Drawing List"*, or other FAA approved data.

备注6: 中文标牌和标识包含在“飞行员操作手册和FAA批准的飞行手册(文件号:AM901.0) 第13版”或CAAC批准的更新版本中。

Note6: Chinese Placards and markings are included in *"Pilots Operating Handbook and FAA Approved Airplane Flight Manual(Document No: AM901.0) revision 13"* or later revisions CAAC approved.

- 完/END -