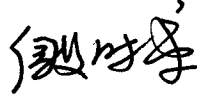


中国民用航空局
Civil Aviation Administration of China

型号认可数据单
TYPE VALIDATION DATA SHEET

编号/No.: VTC0238A
版次/Revision: 1
型号/Type: 680
批准人/ Approved By: 
日期/Date: 2010-12-08

本数据单是型号认可证（编号：VTC0238A）的一部分，它规定了取得此型号合格证的产品符合《中国民用航空规章》有关适航要求的状态和限制。

This data sheet, which is part of Type Certificate No VTC0238A, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulations.

型号认可证持有/Validation of Type Certificate Holder: Cessna Aircraft Company;
邮箱/P.O. Box: 7704, Wichita, Kansas 67277, U.S.A.

有效页清单/List of effective pages

页数/Pages	1	2	3	4	5	6	7	8	9	10	11	12
版次/Revision	1	0	0	0	0	0	0	0	1	1	1	1

第 1 部分 概述

SECTION 1 GENERAL

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

	中国民用航空局认可数据单号、版次及其颁发日期/ CAAC Validation Data Sheet Number, Revision and issuance date	型号合格证数据单号、版次及其颁发日期/ Type Certificate Data Sheet Number, Revision and issuance date
当前 /Current	VTC0238A、R1、2010-12-08	T00012WI、R8、October 6, 2010
历史 /History	VTC0238A、R0、2010-02-28	T00012WI、R6、March 4, 2009
		T00012WI、R5、August 15, 2006
		T00012WI、R3、April 27, 2006
		T00012WI、R3、February 2, 2006
		T00012WI、R2、August 31, 2004
		T00012WI、R1、July 23, 2004
		T00012WI、R0、June 2, 2004

2. 类别/Category: 运输类飞机/Transport Airplanes

3. 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

4. 型号合格证持有人/Type Certificate Holder: Cessna Aircraft Company, Wichita, Kansas 67277, U.S.A.

6. ETOPS: 不适用。

7. CAAC 专用要求/CAAC Special Requirements:

交付到中国的每一 Model 680 航空器必须满足下述特殊要求/Each of Model 680 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：关于中文标记标牌和米制高度表等要求）/The operational requirements of CAAC must be met (e.g. the Chinese language requirements for markings and placards and the altimeter displayed by meter system)。
- (2) 燃油符合“中国国标 3 号燃油--GB6537-94”的规范/Fuel conforming to Specification “PRC National Standard No. Jet Fuel--GB6537-94”。
- (3) 在每一航空器上必须安装快速存储器（QAR）（参照中国适航指令 CAD-97-MULT-38）/Quick Access Recorder（QAR）must be installed on each aircraft（reference to CAD97-MULT-38）。

第 2 部分

SECTION 2

1. 680 型飞机（运输类）2010 年 2 月 28 日批准/Model 680 Aircraft, (Transport Category), Approved Feb. 28, 2010

发动机：两台加拿大 Pratt & Whitney 公司生产的 PW306C 发动机/Engines: Two Pratt & Whitney Canada Corp. PW306C turbofans

燃油：商用煤油 Jet A, Jet A-1, Jet B, JP-4, JP-5, JP-8, 或中国 JET-3（GB 6537-94）/Fuel: Commercial kerosene Jet A, Jet A-1, Jet B, JP-4, JP-5, JP-8, P.R.C. JET-3（GB 6537-94）

发动机极限静推力（标准日，海平面）/ Engine Limits Static thrust standard day, sea level:

起飞/Takeoff: 5770 磅（lb）

最大连续/Max. Continuous: 5770 磅（lb）

发动机转子最大允许工作转速（起飞和最大连续）/Max. permissible engine rotor operating speeds (Takeoff and Maximum Continuous):

N_1 (风扇转速/fan speeds) : 105.0% (100% = 10,608 转/分钟 (r.p.m))

N_2 (燃气发生器转速/Gas Gen. speeds: 105.0% (100% = 26,930 转/分钟 (r.p.m))

最大允许涡轮间燃气温/ Max. permissible interturbine gas temperatures:

起飞/Takeoff: 920°C

最大连续/Max. continuous: 920°C

瞬间 (20 秒) 和起动/Transient (20 sec.) and starting: 950 °C

空速限制/Airspeed limitations:

V_{mo} (最大运行空速/maximum operating V_{mo}) :

海平面到 8,000 英尺/270Sea level to 8,000 ft: 270 KIAS (270 KCAS)

8,000 英尺到 29,833 英尺/8,000 ft. to 29,833 ft: 305 KIAS (305 KCAS)

29,833 英尺以上 M_{mo} /Mmo above 29,833 ft: 0.80 M_I (0.80 MACH 校准的 /calibrated)

V_a (海平面机动/maneuvering sea level) : 30,000 磅/lb.---169 KIAS (169 KCAS)

随重量和高度变化见飞行手册/See AFM for variations with weight and altitude.

V_b (最大阵风强度/speed for max. gust intensity) : 225 KIAS (225 KCAS)

放襟翼空速 (Flap extension speeds) :

V_{FE} (0° 到/to 7°放出/extension) : 250 KIAS (250 KCAS)

V_{FE} (7°到/to 15°放出/extension) : 200 KIAS (200 KCAS)

V_{FE} (15°到/to 35°放出/extension) : 175 KIAS (174 KCAS)

V_{MCA} (最小操纵速度/Minimum control speed) : 空中 7° 襟翼/Air 7 deg flaps---92 KIAS (93 KCAS)

V_{MCA} (最小操纵速度/Minimum control speed) : 空中 15° 襟翼/Air 15 deg flaps---90 KIAS (91 KCAS)

V_{MCL} (最小操纵速度/Minimum control speed) : 着陆 15° 襟翼/Landing 15 deg flaps---88 KIAS (89 KCAS)

V_{MCL} (最小操纵速度/Minimum control speed) : 着陆 35° 襟翼/Landing 35 deg flaps---84 KIAS (84 KCAS)

V_{MCG} (最小操纵速度/Minimum control speed) : 地面 7° 襟翼/Ground 7 deg flaps---96 KIAS (97 KCAS)

V_{MCG} (最小操纵速度/Minimum control speed) : 地面 15° 襟翼 Ground 15 deg flaps---97 KIAS (98 KCAS)

V_{LO} (起落架工作/landing gear operating) : 210 KIAS (207 KCAS)

V_{LE} (起落架伸出/landing gear extended) : 210 KIAS (207 KCAS)

V_{SB} (速度刹车伸出/speed brakes extended) : 有或没有襟翼的任何速度 /Any speed with or without flaps

自动驾驶仪工作时的最大速度/Maximum autopilot operating speed:

海平面到 8,000 英尺/Sea level to 8,000 ft.: 270 KIAS (270 KCAS)

8,000 英尺到 29,833 英尺/8,000 to 29,833 ft.: 305 KIAS (305 KCAS)

29,833 英尺以上/Above 29,833 ft.: 0.80 M_I (0.80 MACH 校准的/calibrated)

最大轮胎地速/Maximum tire ground speed: 165 knots

重心范围/C.G. Range (起落架伸出/Landing Gear Extended) :

设计重心极限/Design C.G. Limits:

前重心/Forward: 16,000 磅到 23,700 磅时的 18.00%平均气动弦 /18.00%MAC at 16,000 lbs. To 23,700 lbs.

从 23,700 磅时的 18%平均气动弦到 30,550 磅时的 21.43%平均气动弦为线性变化/Linear variation from 18.00% MAC at 23,700 lbs. To 21.43% MAC at 30,550 lbs

起飞前重心/Takeoff Forward: 30,300 磅时的 21.30%/21.30% at 30,300 lbs.

后重心/Aft: 16,000 磅到 23,000 磅时的 31.00%平均气动弦/31.00% MAC at 16,000 lbs. To 23,000 lbs.

26,000 磅到 27,100 磅时的 30.00%平均气动弦/30.00% MAC at 26,000 lbs. To 27,100 lbs.

28,500 磅到 30,550 磅时的 31.00%平均气动弦/31.00% MAC at 28,500 lbs. To 30,550 lbs.

各点之间为直线变化/With straight line variation between points.

起落架收起瞬间-8095 英寸-磅/Landing Gear retracting moment (-8095) in-lb.

空重重心范围/Empty Wt. C.G. Range: 基准后+425.00 英寸前/Forward of +425.00 in. aft of datum

平均气动弦/MAC: 107.06 英寸/107.06 in. (起落架伸出的平均气动弦位于基准后 +382.68 英寸处/L.E. of MAC at +382.68 in. aft of datum)

最大重量/Maximum Weight: 起飞/ Takeoff-----30,300 磅/ lb

着陆/ Landing-----27,100 磅/lb

零燃油/ Zero Fuel-----20,800 磅/lb

停机/ Ramp-----30,550 磅/lb.

最小机组（所有飞行）/Minimum Crew for all Flights: 一个正驾驶和一个副驾驶/One pilot and one copilot

座位数/Number of Seats: 最多 14 人（2 个机组加 12 个旅客座椅）/Maximum fourteen (two crew plus twelve passenger seats)

最大行李/Maximum Baggage: 后舱 295 磅/Aft cabin 295 lb. (基准后+440.82 英寸处/+440.82 in. aft of datum)

尾锥 1,000 磅/Tailcone 1,000 lb. (基准后+522.07 英寸处/+522.07 in. aft of datum)

可用燃油量/Fuel Capacity (usable): 总的可用燃油 11223 磅 (1675.2 加仑)。2 个机翼油箱每个承载可用燃油 5611.5 磅 (837.6 加仑/gal); (不可用燃油见注 1) 基准后+412.80 英寸处。/Total usable fuel 11223 lb. (1675.2 gal). Two wing tanks with 5611.5 lbs. (837.6 gal) usable each; (see NOTE 1 for unusable) +412.80 in. aft of datum.

可用滑油量/Oil Capacity (usable): 每个发动机固定一个滑油箱: 每个发动机 5.28 夸脱可用滑油; 基准后+412.80 英寸处; (见注 1) /Tank mounted on each engine: 5.28 quarts usable each engine; +534.17 in. aft of datum; (see NOTE 1)

最大运行高度 47,000 英寸/Maximum Operating Altitude 47,000 ft.

操纵面运动/Control Surface Movements:

升降舵/Elevator	向上/Up 16.6 +1/-0 度/degrees
	向下/Down 9.4 +1/-0 度/degrees
升降舵配平片/Elevator Trim Tab	向下/Down 2.1 +/-0.5 度/degrees
	向下/Down 11.0 +/-0.5 度/degrees
	升降舵配平片向上和向下极限均低于操纵面中立位置/The upper and lower elevator trim tab limits are both below the control surface neutral position.
方向舵/Rudder	向右/Right 30.5 +/-0.5 度/degrees
	向左/Left 30.5 +/-0.5 度/degrees
方向舵配平片/Rudder Trim Tab	向右/Right 3.0 +/-0.5 度/degrees
	向左/Left 3.0 +/-0.5 度/degrees
水平安定面/Horizontal Stabilizer	向上/Up 6.9 +/-0.5 度/degrees
	向下/Down 1.2 +/-0.5 度/degrees
左副翼/Aileron Left	向上/Up 18.8 +/-0.5 度/degrees
	向下/Down 13.4 +/-0.5 度/degrees
右副翼/Aileron Right	向上/Up 18.5 +/-0.5 度/degrees
	向下/Down 13.6 +/-0.5 度/degrees
副翼配平片/Aileron Trim Tab	向下/Down 10.0 +/-0.5 度/degrees
	向下/Down 10.0 +/-0.5 度/degrees

襟翼/Wing Flap

向上/Up 0 +.2/-0.2 度/degrees

7 +/-0.5 度/degrees

15 +/-1.0 度/degrees

起飞/进近/T.O./Apr. 0 +/-0.2 度/degrees

7 +/-0.5 度/degrees

15 +/-1.0 度/degrees

着陆/Land 35 +2.0/-2.0 度/degrees

地面/Ground 0-35 +2.0/-2.0 度/degrees

速度刹车板 5 和 6/Speed Brakes – Panels 5,6 0-24.0 +1.0/-1.0 度/degrees

速度刹车板 1 和 10/Speed Brakes – Panels 1,10 0-35.0 +1.0/-1.0 度/degrees

横滚扰流板 2,3,8,9/Roll Spoilers – Panels 2,3,8,9 0-35.0 +1.0/-1.0 度/degrees

横滚扰流板 4,7/Roll Spoilers – Panels 4,7 0-24.0 +1.0/-1.0 度/degrees

操作说明见飞机维修手册/See Airplane Maintenance Manual for rigging instructions.

生产系列号/Serial Nos. Eligible: 680-0001 及其后/680-0001 and on

基准/Datum: 位于机头千斤顶顶点前 140.40 英寸处/140.40 in. forward of the nose jack point.

测水平措施/Leveling Means: 纵向/Longitudinal – 座舱门内外侧地板 BL 13 英寸处的位置水平线/Place level on the outboard floor panel at BL 13.00 inches, inside of the cabin door.

横向/Lateral – 与驾驶员座椅后大部分后位置内侧座椅轨道相交的位置水平线/Place level across inboard seat tracks behind crew seats at most aft position.

审定基础/Certification Basis:

- (1) 1965 年 2 月 1 日生效并按修正案 25-1 到 25-98 修正的联邦航空条例 14 CFR 25 部/14 CFR Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by amendments 25-1 through 25-98;

- (2) 1990 年 9 月 10 日生效并按修正案 34-1 到 34-3 修正的联邦航空条例 14 CFR 34 部/14 CFR Part 34 of the Federal Aviation Regulations effective September 10, 1990, as amended by amendments 34-1 through 34-3;
- (3) 1969 年 12 月 1 日生效并按修正案 36-1 到 36-24 修正的联邦航空条例 14 CFR 36 部/14 CFR Part 36 of the Federal Aviation Regulations effective December 1, 1969, as amended by amendment 36-1 through 36-24;
- (4) 符合 1972 年的噪声控制法/Compliance with the Noise Control Act of 1972;
- (5) 专用条件如下/Special Conditions as follows:
 - (a) No. 25-214-SC, 高强度辐射场/High Intensity Radiated Fields (HIRF).
 - (b) No. 25-248-SC, 侧向单乘员座椅/Side-Facing Single-Occupant Seats.
- (6) 豁免如下/Exemption as follows:
 - (a) 豁免号 7625A, 对多乘员侧向座椅免于§25.785(b)条（一般乘员防护要求）的豁免/Exemption No. 7625A, from the general occupant protection requirements of §25.785(b) for multiple-occupancy, side-facing divans.
 - (b) 豁免号 8280, 关于§25.161(d)条横向配平要求的豁免/Exemption No. 8280, from the lateral trim requirements of 14 CFR 25.161(d).
 - (c) 豁免号 10089, 关于§25.1447 (c) (1) 条氧气分配部件要求的豁免/Exemption No.10089, from oxygen dispensing unit requirement of §25.1447 (c) (1) .
- (7) 等效安全/Equivalent level of safety as follows:
 - (a) TC2548WI-T-AG-1, 水上迫降时的旅客应急出口/Ditching Emergency Exits for Passengers.
 - (b) TC2548WI-T-AG-2, 客舱之间的门/Door Between Passenger Compartments.
 - (c) TC2548WI-T-AG-3, 过道宽度/Width of Aisle.
 - (d) TC2548WI-T-AG-4, 出口位置指示措施和出口标识符/Exit Locator and Exit Marking Signs.
 - (e) TC2548WI-T-AG-5, 主门标牌/Placards for Main Entry Door.
 - (f) TC2548WI-T-AG-6, 阵风 and 持续涡流载荷/Gust and Continuous Turbulence Loads.

- (g) TC2548WI-T-F-1, 用 1g 失速速度替代作为确定符合性基础的失速最小速度/Use of 1-G Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance.
- (h) TC2548WI-T-P-1, 数字式 APU 指示器（滑油温度、燃气温度、转速表）/Digital APU Indicators (Oil Temperature, Gas Temperature, Tachometer).
- (i) TC2548WI-T-P-2, 数字式发动机参数—燃油流量/Digital Engine Parameter, Fuel Flow.
- (j) TC2548WI-T-P-5, 为保护 APU 和行李舱而使用单个灭火瓶/Use of Single Fire Suppression Bottle for Protection of APU and Baggage Compartment.
- (k) TC2548WI-T-P-6, 反推的合格审定/Certification of Thrust Reversers.
- (l) TC2548WI-T-SE-5, 电动备用方向指示器（罗盘）/Electric Standby Direction Indicator (Compass).
- (m) TC2548WI-T-SG-1, 座舱压力—高高度起飞和着陆运行/Cabin Pressurization - High Altitude Takeoff and Landing Operation.
- (n) Cessna-066650-SG-2, 在 14000 英尺（4267 米）和 15000 英尺（4572 米）之间的高高度机场运行的选装/ (n) Cessna-066650-SG-2, Operation at High Altitude Airports between 14,000 ft and 15,000 ft.
- (8) 不满足§ 25.801 关于水上迫降的要求/14 CFR § 25.801 ditching not complied with.
- (9) 已经证明满足的防冰要求与§ 25.1419一致/Compliance with ice protection has been demonstrated in accordance with 14 CFR § 25.1419.

型号合格证的应用日期: 1999 年 11 月 24 日/Application for type certificate was dated November 24, 1999.

生产基础/Production Basis: 2004年9月更改的第4号生产合格证, 以增加680型飞机生产项目。对新飞机系列, 生产合格证的飞机系列有效性见注10。/Production Certificate No. 4 amended to add Model 680 effective September 1, 2004. See Note 10 for airplane serial effectivity of Production Certificate No. 4 on new airplane serials.

设备/Equipment: 有关适航规章（见合格审定基础）要求的基本设备必须安装在合格审定的飞机上/The Basic required equipment as prescribed in

the applicable airworthiness regulations (see Certification Basis)
must be installed in the airplane for certification.

注 1/NOTE 1: 初始合格审定时为每架飞机提供了当时的重量和平衡信息，包括经合格审定过的空重中的设备清单，以及加载说明。/Current weight and balance information, including list of equipment included in certificated empty weight, and loading instructions are provided for each airplane at the time of original certification.

合格审定过的空重及其对应的重心位置必须包括/The certificated empty weight and corresponding center of gravity location must include:

Unusable fuel	82.9 lb. at +405.86 in.
Full oil	33.57 lb. at +534.17 in.
Hydraulic Fluid	46.83 lb. at +505.53 in.

注 2/NOTE 2: 各飞机必须根据 FAA 批准的件号为 68FM-00 的飞机飞行手册（或 FAA 批准的更改版本）运行。编号为 68PC00 的图解零件目录（或后来的版本）的第 11 章中列出了要求的标牌和标志。/Airplanes must be operated according to the FAA Approved Airplane Flight Manual, part number 68FM-00 (or later FAA approved revision). Required placards and markings are listed in Chapter Eleven (11) of Illustrated Parts Catalog, part number 68PC00 (or later revision).

注 3/NOTE 3: 检查、强制性退役寿命信息、以及其它持续适航要求等见维修手册第 4 章“适航限制”/See Maintenance Manual, Chapter Four (4), "Airworthiness Limitations" for inspections, mandatory retirement life information, and other requirements for continued airworthiness.

注 4/NOTE 4: 型号合格证上的飞机定义是零件清单 6900000---飞机装配/Aircraft definition for Type Certificate is Parts List 6900000, Airplane Assembly.

注 5/NOTE 5: 合格审定维修要求（CMR）见维修手册第 4 章。工程批准 Certification Maintenance Requirements (CMR) are found in Maintenance Manual, Chapter Four (4). Engineering approval of the CMR's is documented in the Cessna System Safety Assessment reports.

注 6/NOTE 6: 已被删除/Deleted.

注 7/NOTE 7: 680 型飞机已由符合某些 25 部条款被批准在高高度运行（41,000 英尺以上高度）。为确保维持符合性，任何对压力容器的更改都必须根据合适的合格审定基础中表明要求获得批准。为确保压力符合性不

受影响，这包括可能导致大于 3.98 平方英寸的压力容器开口的更改，或在破裂增长过程中，或天线损失过程中。/The Model 680 airplanes have been approved for high altitude operations (altitudes above 41,000 feet) by compliance with certain Part 25 sections. To ensure the compliance is maintained, any modifications to the pressure vessel must be approved in accordance with the requirements as shown in the appropriate certification basis. To ensure pressurization compliance is not affected, this includes modifications which could result in a pressure vessel opening, either through crack-growth or antenna loss, greater than 3.98 sq. in.

注 8/NOTE 8: 2003 年 12 月 24 日，680 型飞机获得一个临时型号合格证，随后在 2004 年 6 月 2 日颁发型号合格证时其被删除。/The Model 680 received a Provisional Type Certificate on December 24, 2003, that was subsequently cancelled when the Type Certificate was issued on June 2, 2004.

注9/NOTE 9: 680型飞机已经表明满足减少的最小垂直间隔（RVSM）空域的运行适航要求。没有服务通告与此要求相关。所有系列号都是适当的。适航批准在Cessna符合性报告AV-680-108《680型飞机RVSM合格审定》中有记载。/The Model 680 has been shown to meet the airworthiness requirements for operations in Reduced Vertical Separation Minimum (RVSM) airspace. No Service Bulletin is associated with this requirement. All serial numbers are eligible. Airworthiness approval is documented in Cessna compliance report AV-680-108, Model 680 RVSM Certification.

注10/NOTE10: 第4号生产合格证适用于系列号680-0005及其以后的680型飞机。/Production Certificate No. 4 applies to Model 680 serial numbers 680-0005 and on.

-----结束/END-----