

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No: VTC0262A

版次/Revision: 2

型号/Type:

Bell Model 429

批准人/Approved By:

徐超群

职务/Title: Director General of CAAC-AAD

日期/Date: 2018 年 11 月 16 日

本数据单是型号认可证(编号: VTC0262A)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: VTC0262A), 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.

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

Bell Helicopter Textron Canada Limited

12800 rue de l' Avenir

Mirabel, Quebec. J7J1R4, Canada

目录 / Contents

第 1 部分总则（所有型别） /SECTION 1 General (ALL MODELS)	3
第 2 部分/SECTION 2: 429	4
I. 总则/General	4
II. 认可审定基础/Validation Certification Basis.....	4
III.技术特征和运行限制/Technical Characteristics and Operational Limitations.....	4
IV.经批准的中文标记标牌/ The Approved Chinese Placards.....	7
V. 注释/NOTES	8

第 1 部分总则（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	VTC0262A 2 2018/11/16	H-107, Issue 4, May 8, 2017
历史/ History	VTC0262A 1 2012/10/18 VTC0262A 0 2011/10/09	H-107, Issue 3, Jan 11, 2012

- | | |
|--------------------------------------|---|
| 2. 适航类别/Airworthiness Category: | 正常类/Normal Category |
| 3. 认可当局/Validation Authority: | 中国民用航空局/CAAC |
| 审定当局/Certifying Authority: | 加拿大运输部/TCCA |
| 4. 型号合格证持有人/Type Certificate Holder: | Bell Helicopter Textron Canada Limited
12800 rue de 1 ^{er} Avenir
Mirabel Quebec, J7J1R4, Canada |

5. 认可审定基础/Validation Certification Basis

CAAC 的认可审定基础由 TCCA 的审定基础（详见 TCCA 型号合格证数据单：编号 H-107），和 CAAC 的附加技术条件组成。

The CAAC validation certification basis consists of the TCCA certification basis (refer to TCCA Type Certificate Data Sheet No. H-107), and the CAAC additional technical conditions.

第 2 部分/SECTION 2: 429

I. 总则/General

- | | |
|--------------------------------------|--|
| 1. 型别/Model: | 429 |
| 2. 适航类别/Airworthiness Category: | 正常类/Normal Category |
| 3. 型号合格证持有人/Type Certificate Holder: | Bell Helicopter Textron Canada Limited
12800 rue de l' Avenir
Mirabel Quebec, J7J1R4, Canada |
| 4. TCCA 批准日期/TCCA Approved Date: | 2009.06.20/20 June 2009 |
| 5. CAAC 批准日期/CAAC Approved Date: | 2011.10.09/09 OCT 2011 |

II. 认可审定基础/Validation Certification Basis

CAAC的认可审定基础由TCCA的审定基础和CAAC的附加技术条件组成。

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

TCCA 审定基础/certification basis

详见TCCA型号合格证数据单H-107（版本4）中429型机的审定基础

Refer to TCCA Type Certificate Data Sheet No. H-107 Issue 4 for Model 429

CAAC附加技术条件

1. CCAR21.29, Amendment Level: R3
2. 环保标准/Environmental Standards
 - (1) 排出物/Emissions: CCAR-34 涡轮发动机燃油排泄和排气排出规定/Fuel Venting and Exhaust Emission Requirement for Turbine Powered Airplanes
 - (2) 噪声/Noise: CCAR-36-R1 航空器型号和适航合格审定噪声规定/Noise Standards: Aircraft Type and Airworthiness Certification
3. 用于告知乘客或地面救援人员舱门位置和打开方法的标记标牌必须满足中文要求/All literal markings and placards on an aircraft used for indicating passengers or outboard rescue personnel of the location of doors and their means of opening must be at least in Chinese language.
4. 燃油符合中国航空燃油3号喷气燃料（GB-6537-2006）/Fuel conforms to China Aviation No.3 JET FUEL (PRC National Standard GB-6537-2006)

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

构型/Configuration

对于序列号 57001 及之后的 429 型航空器型号定义在 Bell Helicopter Textron 顶层图纸 429-100-001 版次 CG 或其后续批准的版本中

The Model 429 is defined by Bell Helicopter Textron top drawing number:

429-100-001 Revision CG or later approved revisions, for serial numbers 57001 and Subsequent

发动机/Engines

2 台加拿大普惠公司 PW207D1 或 PW207D2（见注释 3）

（CAAC VTC 编号：VTC0104E，VTCDS 版本 2）

2 Pratt Whitney Canada PW207D1 or PW207D2 (see NOTE 3)

(CAAC VTC No. VTC0104E, VTCDS Revision 2)

燃油/Fuel

型号/Type	规范/SPECIFICATION	
Kerosene Jet A, A-1, JP8	Canada CGSB 3.23 3-GP-23	USA ASTM D1655 MIL-DTL-83133
Wide Cut Jet B JP4	CGSB 3.22 CGSB 3.22	ASTM D1655 MIL-DTL-5624
High Flash JP5	3-GP-24	MIL-DTL-5624

中国航空燃油 3 号喷气燃料 (GB-6537-2006)

Chinese Jet Fuel No.3 (GB-6537-2006)

滑油/Oil

对批准使用的发动机滑油，禁止混牌使用。经批准的传动装置和减速器滑油参考维护手册 BHT-429-MM-01。

For approved engine oil types, prohibition against mixing brands and for approved transmission and gearbox oil types refer to Maintenance Manual BHT-429-MM-01

发动机限制/Engine Limits

	扭矩 % (磅英尺) Torque % (lbft.)	涡轮温度 (摄氏度) Turbine Temp (°C)	燃气发生器转速 % (转每分钟) Gas Gen Speed % (RPM)
<u>双发工作/Twin Engine Operation</u>			
起飞(5 分钟)/Take-off (5 minutes)	54.3(523)	900	99.8 (57,900)
最大连续/Max Continuous	53.3(513)	850	97.2 (56,400)
<u>单发不工作/One Engine in Inoperative(OEI)</u>			
30 秒 OEI/30 seconds OEI	66.3(638)	990	104.3 (60,500)
2 分钟 OEI/2 minutes OEI	63.8(614)	950	102.2 (59,300)
30 分钟 OEI/30minutes OEI	60.2(580)	925	101.2 (58,700)
连续 OEI/Continuous OEI	59.5(573)	900	99.8 (57,900)

瞬时限制见飞行手册

瞬时输出轴转速限制值是 104.5% (6271 转每分钟)

See Rotorcraft Flight Manual for transient limits.

Output shaft speed limit is 104.5%(6,271 RPM)

减速器限制/Transmission Limits

	扭矩限制值% Torque Limits%
<u>双发工作/Both Engines on operation</u>	
起飞/Take-off	100
最大连续/Maximum Continuous	100
瞬时/Transient	105
<u>单发不工作/One Engine Inoperative</u>	
30 秒 OEI/30 Second OEI	66.3
2 分钟 OEI/2 Minutes OEI	59.1
连续 OEI/Continuous OEI	50.0

旋翼限制/Rotor Limits:

空速限制/Airspeed limits:	无动力/Power off			有动力/Power on			V_{NE} (不
	最大/Maximum	423RPM	107%	最大/Maximum	411RPM	104%	
	最小/Minimum	336RPM	85%	最小/Minimum	391RPM	99%	

可超越速度) 155 KIAS

附加详细信息参见批准的飞行手册。

V_{NE} (Never Exceed) 155 KIAS.

For further information see Rotorcraft Flight Manual as listed in Approved Publications.

最大重量(质量)/Maximum Weights(Mass):

基本型飞机/Basic Aircraft

3175 公斤(7000 磅) 内部载重

3629 公斤(8000 磅) 外部载重

3,175kg (7,000lb) Internal loading

3,629kg (8,000lb) External loading

增加后的总重量(见注释 5)/Increased gross weight (see NOTE 5)

3402 公斤(7500 磅) 内部载重

3629 公斤(8000 磅) 外部载重

3,402kg (7,500lb) Internal loading

3,629kg (8,000lb) External loading

重心范围/Centre of Gravity Range:

参考批准的飞行手册(见注释 4)

Refer to approved RFM (see Note 4)

测量基准/Datum:

429 型零站位(SAT0) 位于直升机机头前 183.6 厘米(72.3 英寸) 处

el 429 Station 0 datum is 183.66 cm (72.3 in.) forward of the nose of the aircraft.

水平测量措施/Leveling Means:

水平测量器或水平尺位于客舱或驾驶舱座椅滑轨上, 包括纵向和横向。

Protractor or level placed on the crew or passenger floor or seat rails, both longitudinally and laterally.

最小飞行机组/Minimum Flight Crew:

一个驾驶员

1 pilot

最大乘员数/Maximum Occupants:

8 人(含机组)

8 (includes crew)

最大货物装载/Maximum Cargo:

载重计划见旋翼航空器飞行手册

Refer to Rotorcraft Flight Manual for Loading Schedule.

燃油容量/Fuel Capacity

燃油容量见旋翼航空器飞行手册

Refer to Rotorcraft Flight Manual for Fuel Capacity

滑油容量/Oil Capacity

滑油容量见旋翼航空器维护手册

Refer to Rotorcraft Maintenance Manual for Oil Capacity

高度限制/Altitude Limits

最大高度 6096 米 (20000 英尺) 气压高度
Maximum altitude 6,096m (20,000ft.) pressure altitude

外界大气温度限制/OAT limits

-40°C (-40°F) 到 51.7°C (125°F)
-40°C (-40°F) to 51.7°C (125°F)

要求的设备/Required Equipment

要求的设备必须按加拿大运输部批准的飞行手册安装到飞机上
The required equipment must be installed in the aircraft as follows:
Transport Canada approved Rotorcraft Manual.

有效系列号/Serial Numbers Eligible

57001 开始
57001 and Subsequent

标牌/Placards

所有飞行手册列出的批准标牌必须安装在航空器规定位置。
All placards listed in the approved Rotorcraft Flight Manual must be installed in the specified locations.

批准的出版物/Approved Publications

- a) 加拿大运输部 2009 年 6 月 19 日批准的贝尔旋翼航空器飞行手册 BHT-429-FM-1 或后续经批准的版本。
- b) 寿命件和批准的替换时间列在经批准的维护手册 BHT-429-MM-01 (2009 年 6 月 19 日) 第 4 章, 适航限制章节中。
- a) Transport Canada approved Bell Rotorcraft Flight Manual BHT-429-FM-1, dated 19 June, 2009 or later approved revision.
- b) Life limited components and approved retirement times are listed in the Approved Chapter 4, Airworthiness Limitations Section of the Maintenance Manual BHT-429-MM-01, dated 19 June, 2009 or later approved revision.

IV.经批准的中文标记标牌/ The Approved Chinese Placards

序号 Code	标题 Title	编号 Number	版本 Rev.
1	Auxiliary Equipment Kit Foreign Certification – Chinese Markings	429-706-067-113	版本-及后续经批准的版本 Rev. - or later approved revision

V.注释/NOTES

- 注释/NOTE 1: 此 TC 证适用白天/夜间 VFR: 仪表飞行操作规定 (IFR) (双驾驶和单驾驶) : A 类, 发动机隔离的正常类旋翼航空器。
This type certificate is for a Day/Night VFR; Instrument Flight Rules(IFR) Operations (Dual and Single Pilot); Category A, Normal Category Rotorcraft with engine isolation.
- 注释/NOTE 2: 噪音等级证明在批准的旋翼航空器飞行手册内列出。
Certification Noise Levels are detailed in the approved Rotorcraft Flight Manual.
- 注释/NOTE 3: PW207D1 发动机没有安装燃油加温器。PW207D2 与 PW207D1 相同, 但安装了燃油加温器
PW207D1 engines are without a fuel heater. The PW207D2 is identical to thePW207D1 but has a fuel heater installed.
- 注释/NOTE 4: 当前载重及平衡报告, 包括批准空重的设备清单和额定载荷, 必要时, 每一航空器必须符合其初始取证状态。
The current weight and balance report, including list of equipment included in approved empty weight and loading instructions, when necessary, must be in each aircraft at the time of original certification.
- 注释/NOTE 5: 最大起飞重量超过 3175 公斤(7000 磅)的 Bell 直升机只有在按照 BHT-429-FMS-11 (内部增重至 7500 磅(3402 公斤)要求, 当安装了 Bell 组件 429-706-079 条件下才允许运行。
Operation of Bell 429 aircraft above a MTOW of 3,175 kg (7,000 lb) is only permitted in accordance with BHT-429-FMS-11 "Increased Internal Gross Weight to 7,500 pounds (3,402kg)" when Bell Kit 429-706-079 is incorporated.
- 注释/NOTE 6: 当按照 BHT-429-FMS-2 升级到 Sea State 5, 安装了要求的安全性设备和水上迫降设备后, 可表明附加的对于水上迫降要求的 527.563 和 527.801 条款的符合性。
Additional compliance with AWM527 is shown for paragraphs 527.563 and 527.801 for Ditching, when the required safety equipment and ditching equipment is installed in accordance with BHT-429-FMS-2 for up to Sea State 5.