

## 型号认可证数据单

TYPE VALIDATION CERTIFICATE DATA SHEET

编号/No: VTC0233E

版次/Revision: 0

型号/Type:

PW307A

批准人/Approved By:

张仁鹰

日期/Date: 2010-1-25

本数据单是型号认可证(编号: VTC0233E)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: VTC0233E), 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:

Pratt & Whitney Canada Corp.

1000 Marie-Victorin

Longueuil, Quebec Canada J4G 1A1

有效页清单/List of effective pages :

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

中国民用航空局  
CIVIL AVIATION ADMINISTRATION OF CHINA

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 Data Sheet

|               | 中国民用航空局认可数据单号、版次和颁发日期<br>CAAC Validation Data Sheet Number, Revision and<br>issuance date  | 型号合格证数据单号、版次和颁发日期<br>Type Certificate Data Sheet Number, Revision and issuance<br>date |
|---------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 当前<br>Current | 编号:VTC0233E; 版次: 0; 颁发日期: 2010年1月25日;<br>No.VTC0233E; Revision 0; Date of Issue: 2010-1-25 | 编号: E33; 版次: 4; 颁发日期: 2007年4月12日<br>No.E33, Revision 4, Date of Issue: April 12, 2007  |
| 历史<br>History | 无                                                                                          | 无                                                                                      |

2. 类别/Category: 发动机/ Engine

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/Transport Canada

4. 型号合格证持有人/ Type Certificate Holder: Pratt & Whitney Canada Corp.  
Address: 1000 Marie-Victorin, Longueuil, Quebec Canada J4G 1A1

5. 制造厂/Manufacturer: Pratt & Whitney Canada Corp.

6. ETOPS: 不适用 /NA

7. CAAC专用要求/CAAC Special Requirements: 满足国标GB6 537-2006燃油牌号要求/compliance with requirement of  
GB6537-2006

## 第2部分/Section 2

### A. 审定基础/Certification Basis

#### 1. 适航标准/ Airworthiness Standards:

a) 1999年12月11日版生效的加拿大适航手册533章第5次更改（相当于美国14 FAR 33部第20修正案）；

Canadian Airworthiness Manual, Chapter 533 change 5, dated 01 December, 1999 as amended by NPA-2000-265, adopted March 5, 2001 which is equivalent to FAR 33 effective February 1, 1965, with amendment 33-1 through 33-20. NPA-2000-265 incorporates the requirements of NPRM 98-19 (reference proposed FAR 33.76 b and c) and NPA E20.

b) 适航手册516章第6修正案B分章“航空器发动机排放标准”与国际民航组织ICAO附件16第II卷第4修正案（相当于14 FAR 34部第3修正案，1999年2月31日生效）；

Airworthiness Manual, Chapter 516, Change 516-06, subchapter B “Aircraft Engine Emissions” plus ICAO Annex 16 Volume II, amendment 4. Compliance with FAR 34 up to amendment 34-3, February 3, 1999 has also been demonstrated.

2. 专用条件/ Special Conditions (SC): 无/ none

3. 等效安全项目/ Equivalent Safety Findings (ESF): 无/ none

4. 偏离/Deviations: 无/none

5. 环境标准/Environmental Standards: 无/none

### B. 技术特性/Technical Characteristics

#### PW307A型发动机

|                                     |                                                             |                                                              |      |                                      |      |                                                         |
|-------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|------|--------------------------------------|------|---------------------------------------------------------|
| 型号PW307A/MODEL PW307A               |                                                             |                                                              |      | 2005年4月15日批准/Approved April 15, 2005 |      |                                                         |
| 类型/Type                             | 双转子涡轮风扇发动机/Twin spool front fan, jet propulsion gas turbine |                                                              |      |                                      |      |                                                         |
| 额定值（见注1）<br>Ratings<br>(See Note 1) |                                                             | 推力/Jet Thrust<br>daNlb                                       |      | 环境限制/Ambient Limit<br>℃°F            |      | 测量的涡轮间<br>温度/Measured<br>Interturbine<br>Temperature(℃) |
|                                     | 起飞/Take-off                                                 | 2849                                                         | 6405 | 33.4                                 | 92.1 | 920                                                     |
|                                     | 最大连续/<br>Maximum<br>Continuous                              | 2849                                                         | 6405 | 33.4                                 | 92.1 | 920                                                     |
|                                     | 启动/Starting                                                 |                                                              |      |                                      |      | 950                                                     |
| 发动机转速<br>/Engine Speed              | 最大转速/<br>Maximum RPM                                        | N <sub>1</sub> 11110 (101%)      N <sub>2</sub> 28500 (100%) |      |                                      |      |                                                         |
|                                     | 最小飞行慢车<br>转速/Minimum<br>Flight Idle RPM                     | N <sub>2</sub> 17100 (60%)                                   |      |                                      |      |                                                         |

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与各发动机相关数据（另有说明除外）/Data pertinent to all models except as indicated

|                       |                                                        |                 |                  |
|-----------------------|--------------------------------------------------------|-----------------|------------------|
| 引气/Air Bleed          | 参见安装手册第二章/Refer to Section 2 of Installation Manual.   |                 |                  |
| 燃油压力/Fuel Pressure    | 参见安装手册第六章/Refer to Section 6 of Installation Manual.   |                 |                  |
| 燃油温度/Fuel Temperature | 参见安装手册第六章/Refer to Section 6 of Installation Manual.   |                 |                  |
| 滑油压力/Oil Pressure     | 参见安装手册表格2-1/Refer to Installation Manual Table 2-1.    |                 |                  |
| 滑油温度/Oil Temperature  | 参见安装手册表格2-1/Refer to Installation Manual Table 2-1.    |                 |                  |
| 燃油牌号/Fuel Type        | 参见维修手册/Refer to Maintenance Manual; 符合国标GB6537-2006要求. |                 |                  |
| 滑油量/Oil Capacity      | 升/Litres                                               | 英加仑/Imp.gallons | 美加仑/U.S. gallons |

PW307A:

|             |      |      |      |
|-------------|------|------|------|
| 总共/Total:   | 7.9  | 1.73 | 2.08 |
| 可用/Useable: | 2.99 | 0.66 | 0.79 |

设备/Equipment PW307A

（见注6/See Note 6）

燃油泵，燃油滤，空冷滑油冷却器，电子燃油迫近旁通器及指示器，燃油温度传感器，燃油压力继电器，控制系统（双通道全权限数字电子控制），碎片探测器，滑油压力传感器，滑油温度传感器，电子滑油迫近旁通器及指示器，振动传感器，N1转速传感器，N2转速传感器，P3压力传感器，放气阀门螺线管，可变燃气舵致动器，火警探测器，P1/T1探针。额外的信息参见安装手册。至于输出驱动说明书，附件传动，名义尺寸，重量，惯性和重心等信息，也参见安装手册。

Fuel pump, fuel filter, air cooled oil cooler, electrical fuel impending bypass and bypass indicator, fuel temperature sensor, fuel pressure switch, control system (dual channel FEDEC with dedicated power source), chip detector, oil pressure sensor, oil temperature sensor, electrical oil impending bypass and bypass indicator, vibration sensor, N1 speed sensor, N2 speed sensor, P3 pressure transducer, BOV solenoid, variable vane actuator, fire detector, and P1/T1 probes are standard equipment as shown in the Engine Assembly Parts List. For additional information refer to the Installation Manual. For output drive specification, accessory drives, principle dimensions, weights, inertias and center of gravity locations, refer to the Installation Manual.

审定基础/ PW307A

Basis of Certification a) 1999年12月1日版生效的加拿大适航手册533章第5次更改（相当于美国14 FAR 33部第20修正案）。Canadian Airworthiness Manual, Chapter 533 change 5, dated 01 December,

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|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3, 4, 5 and 6)                     | <p>1999 as amended by NPA-2000-265, adopted March 5, 2001 which is equivalent to FAR 33 effective February 1, 1965, with amendment 33-1 through 33-20. NPA-2000-265 incorporates the requirements of NPRM 98-19 (reference proposed FAR 33.76 b and c) and NPA E20.</p> <p>b) 适航手册516章第6修正案B分章“航空器发动机排放标准”与国际民航组织ICAO附件16第II卷第4修正案（相当于14 FAR 34部第3修正案，1999年2月3日生效）；Airworthiness Manual, Chapter 516, Change 516-06, subchapter B “Aircraft Engine Emissions” plus ICAO Annex 16 Volume II, amendment 4. Compliance with FAR 34 up to amendment 34-3, February 3, 1999 has also been demonstrated.</p> <p>c) 删除/deleted</p> <p>型号合格证的申请日期：2002年1月30日 / Application date for Type Certificate: January 30, 2002</p> |
| 批准的出版物<br>Approved<br>Publications | <p>a) PW307A安装手册工程报告5598/ PW307A Installation Manual ER5598</p> <p>b) PW307A全权限数字电子控制界面控制文件工程报告5220/ PW307A FEDEC Interface Control Document ER 5220</p> <p>c) PW307A第一批生产发动机装配组件清单A30P0100-01/ PW307A Engine Assembly Parts List No. A30P0100-01 for the first production engine.</p> <p>d) PW307A维修手册适航限制部分P/N 30P0422/ PW307A Airworthiness Limitation Section of Maintenance Manual P/N 30P0422.</p>                                                                                                                                                                                                                                                                                                           |
| 持续适航文件                             | <p>a) PW307A维修手册P/N 30P0422/ PW307A Maintenance Manual P/N 30P0422</p> <p>b) PW307A大修手册P/N 30P0423/ PW307A Overhaul Manual P/N 30P0423</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 注1/Note 1                          | <p>发动机等级分类基于干海平面静态 ICAO标准的大气环境，不存在外部附加载荷和引气。等级分类可以通过指定的滑油和燃油条件下试验得到，同时试验中进气和排气管道在安装手册中也有明确规定。</p> <p>The engine ratings are based on dry sea level static ICAO standard atmospheric conditions, with no external accessory loads and no airbleed. The quoted ratings are obtainable on a test stand with the specified fuel and oil, and using the exhaust duct and intake bellmouth specified in the Installation Manual.</p>                                                                                                                                                                                                                                                                                     |

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- 注2/Note 2                      PW307系列发动机仅作为多发发动机安装被批准。
- The PW307 series engine models are approved for multiple engine installation only.
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- 注3/Note 3                      PW307系列发动机满足加拿大运输部和美国联邦航空局对于结冰条件下的运行规定。这些发动机也满足适航手册533.27的规定，因此不需要外部防护罩。
- The PW307 series engine meet Transport Canada and FAA requirements for operation in icing conditions. These models also meet requirements of Airworthiness Manual 533.27 and therefore do not require external armouring.
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- 注4/Note 4                      PW307A 发动机/ Model PW307A
- 高强度辐射场和闪电防护、安装要求在安装手册中被提供。
- HIRF and Lightning conformance and installation requirements are provided in the Installation Manual.
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- 注5/Note 5                      PW307A 发动机/ Model PW307A
- 电子发动机控制软件的设计、研发、测试和说明符合关键类别RTCA/DO178B中A级的条款要求。
- The software contained in the Electronic Engine Control has been designed, developed, tested and documented in accordance with the provisions of the Critical Category, Level A of RTCA/DO178B.
- 
- 注6/Note 6                      发动机材料单中并不包含推力换向器。关于推力换向器的安装要求见安装手册。
- The engine bill of material does not include a thrust reverser. Considerations for the installation of a thrust reverser are contained in the Installation manual.
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- 注7/Note 7                      PW307A发动机带有“有限时间分配”的限制。分配标准包含在维修手册P/N 30P0422的适航限制部分。
- The PW307A engine is approved with Time Limited Dispatch (TLD) Limitations. The dispatch criteria are contained in the Airworthiness Limitations section of Maintenance Manual P/N 30P0422.
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- 注8/Note 8                      符合JAR-E 2001年11月1日生效的第11修正案。
- Compliance to JAR-E, Change 11, dated November 1, 2001, has been demonstrated.

结束

END