**BOMBARDIER**
Toronto (de Havilland)
**PROPRIETARY INFORMATION**

# PPS 16.07

**PRODUCTION PROCESS STANDARD**

# APPLICATION OF PROTECTIVE COATING TO AIRCRAFT PULLEYS AND QUADRANTS

Issue 6
- This standard supersedes PPS 16.07, Issue 5.
- PPS ACN 16.07/1 has been superseded in this or previous issues.
- Vertical lines in the left hand margin indicate changes over the previous issue.

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| Prepared By: | (Christie Chung) | May 23, 2008 |
| | Production Process Standards Group | |
| Approved By: | (L.K. John) | May 26, 2008 |
| | Materials Technology | |
| | (B. Jenkins) | May 27, 2008 |
| | Quality | |



This PPS is effective as of the distribution date specified on the accompanying distribution notice.

Direct any PPS related questions to the PPS Group (416) 375-7641.

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## 1 SCOPE

1.1 This Production Process Standard (PPS) specifies the procedure and requirements for the application of urethane protective coating to aircraft pulleys and quadrants.

1.1.1 This PPS complements the engineering drawings that specify its use as an authorized instruction. The procedure specified in this PPS must be followed to ensure compliance with all applicable specifications. In general, if this PPS conflicts with the engineering drawing, follow the engineering drawing. The requirements specified in this PPS are necessary to fulfil the engineering design and reliability objectives.

1.1.2 Refer to PPS 13.26 for the subcontractor provisions applicable to this PPS.

1.1.3 Procedure or requirements specified in a Bombardier BAPS, MPS, LES or P. Spec. **do not** supersede the procedure or requirements specified in this PPS. Similarly, the procedure and requirements specified in this PPS are not applicable when use of a BAPS, MPS, LES or P. Spec. is specified.

## 2 HAZARDOUS MATERIALS

2.1 Before receipt at Bombardier Toronto (de Havilland), all materials must be approved and assigned Material Safety Data Sheet (MSDS) numbers by the Bombardier Toronto (de Havilland) Environment, Health and Safety Department. Refer to the manufacturer's MSDS for specific safety data on any of the materials specified in this PPS. If the MSDS is not available, contact the Bombardier Toronto (de Havilland) Environment, Health and Safety Department.

## 3 REFERENCES

3.1 PPS 13.26 - General Subcontractor Provisions.

3.2 PPS 25.65 - DSC 479-1 One Part Urethane Adhesive.

3.3 PPS 31.17 - Solvent Usage.

3.4 PPS 34.08 - Application of Epoxy-Polyamide Primer.

## 4 MATERIALS AND EQUIPMENT

### 4.1 Materials

4.1.1 DSC 479-1 adhesive, urethane base.

### 4.2 Equipment

4.2.1 Nylon bristle brush, 1/2" wide.

4.2.2 Bombardier approved safety glasses.

4.2.3 Protective cotton gloves (e.g., DSC 422-1).

## 5 PROCEDURE

### 5.1 Preparation of Pulleys and Quadrants

5.1.1 Before application of the urethane protective coating, prime the cable grooves of the pulley or quadrant with F19 primer according to PPS 34.08. Allow the F19 primer to cure for a minimum of 24 hours before the application of the protective coating.

5.1.2 Primed areas must not be touched with bare hands or subjected to contamination. Wear clean cotton gloves at all times when handling primed surfaces.

### 5.2 Preparation of Urethane Adhesive

5.2.1 Prepare urethane adhesive according to PPS 25.65.

### 5.3 Application of Protective Adhesive

5.3.1 Using a nylon bristle brush, apply a uniform coat of adhesive to the grooves of the pulley or quadrant and allow the adhesive to dry for approximately 1/2 hour before re-coating.

5.3.2 Repeat paragraph 5.3.1 until a coating thickness of 0.006 to 0.010 inches is achieved.

### 5.4 Curing

5.4.1 Refer to PPS 25.65 for the cure to handle and full cure times and temperatures.

### 5.5 Clean-Up

5.5.1 Remove uncured adhesive from tools and equipment according to PPS 31.17.

## 6 REQUIREMENTS

6.1 The grooves of the pulley or quadrant must be completely covered with the protective coating.

6.2 There must be no evidence of runs, sags, pits, blisters, voids or inclusions in the coating.

6.3 The total thickness of the cured coating must be 0.006" to 0.010".

6.4 The adhesive must be allowed to cure according to PPS 25.65 before further working the part or installation on the aircraft.

## *7 SAFETY PRECAUTIONS*

*7.1 Observe general shop safety precautions when performing the procedure specified herein.*

*7.2 Refer to PPS 31.17 for the safety precautions for handling and using solvents.*

*7.3 Keep adhesives away from fire and other sources of ignition.*

*7.4 Ensure sufficient ventilation is supplied when using adhesives in confined areas.*

*7.5 Avoid skin contact with adhesives. Do not use protective hand cream as it may cause contamination of cleaned or adhesive coated surfaces.*

## 8 PERSONNEL REQUIREMENTS

8.1 Personnel responsible for the application of protective coating to aircraft pulleys and quadrants must have a basic understanding of the procedure and requirements as specified herein and must have exhibited their familiarity to their supervisor.

## 9 STORAGE

9.1 Refer to PPS 25.65 for adhesive storage requirements.