# SERVICE LETTER

**SUBJECT: PRATT & WHITNEY CANADA SERVICE INFORMATION LETTER PT6A-116**

To all Customers and Operators: Date: Mar 20/03

This Service Letter is issued to draw attention to the following vendor information:

**P&WC SIL PT6A-116 - Boroscope Inspection in Conjunction with Fuel Nozzle Check**

Vendor SIL P&WC SL PT6A-116 recommends that the boroscope inspection be scheduled at the Operators earliest convenience. Pilatus fully supports the recommendation in P&WC SIL PT6A-116, because non-compliance could drastically affect engine performance.

Operators requiring further information on this subject, please contact their local P&WC representative or Pilatus at the address given below:

PILATUS AIRCRAFT LTD.,
CUSTOMER LIAISON MANAGER,
CH-6371 STANS,
SWITZERLAND.

General Aviation
Tel : + 41 41 619 6319
Fax: + 41 41 619 6224
eMail: pilga@pilatus-aircraft.com
Government
Tel: + 41 41 619 6509
Fax: + 41 41 619 6224
eMail: rpaterson@pilatus-aircraft.com

PILATUS BUSINESS AIRCRAFT LTD.,
PRODUCT SUPPORT DEPARTMENT,
11755 AIRPORT WAY,
BROOMFIELD, CO 80021.
USA

Tel : 303 465 9099
Fax: 303 465 6040
eMail: Productsupport@PilBal.com

PILATUS AUSTRALIA (Pty.) LTD.,
PO BOX 732,
MARLESTON SA 5033,
AUSTRALIA

Tel : (08) 8234 4433
Fax: (08) 8234 4499
Free Call: 1800 445 007
eMail: info@pilatus.com.au

**Attachments:P&WC SIL PT6A-116**

**Pratt & Whitney Canada**
A United Technologies Company

S.I.L NO. PT6A-116

# SERVICE INFORMATION LETTER

**Subject:** **Borescope Inspection in Conjunction with Fuel Nozzle Check**

**Applicability:** **All PT6A Engine models**

During the investigation of a recent Compressor Turbine (CT) Blade fracture event, it was noted that not all operators are performing the recommended borescope inspection at the same time as their scheduled fuel nozzle maintenance.

This requirement was introduced to help detect the presence of heat distress at the CT Vane Ring. Pratt & Whitney Canada Corp. (P&WC) has determined that the loss of a part of a CT Vane trailing edge as a result of heat distress may not necessarily result in a significant change to the CT Vane flow class or overall efficiency of the vane assembly. Overall engine performance deterioration may not be seen at regular ground power checks or during flight data collection for the ECTM plots.

A hole in one vane of the CT Vane Ring trailing edges, in excess of the limits specified in the applicable Maintenance Manual (MM), will change the exit flow velocity or angle at that particular vane window during engine operation. As a result of this damage, each CT Blade passing behind this window receives an impulse different from that of the other CT vane windows. Under such abnormal excitation, CT blade firtree fatigue may occur and the MM requires replacement of the entire set of CT Blades.

In light of the possible detrimental consequences listed above, P&WC wishes to remind operators of the importance of performing borescope inspection during fuel nozzle check as per the M M. For operators who have not been complying to this requirement P&WC recommends that a borescope inspection be scheduled at their earliest convenience and that this practice be incorporated as part of their normal scheduled Fuel Nozzle maintenance.

This recommendation can be found in the MM section 72-00-00, table 601, "Periodic Inspection".

Yours truly,

PRATT & WHITNEY CANADA CORP.

Giovanni Mulas, Eng.
Manager, Turboprop Customer Solutions & Reliability
Business Aviation & Military Engines

This Service Information Letter is valid until superseded by revision.



ISSUED: 27 January 2003

**PRATT & WHITNEY CANADA CORP.**
MARIE-VICTORIN, LONGUEUIL
QUEBEC, CANADA J4G 1A1
PRINTED IN CANADA