

FOR PLANNING PURPOSES

SERVICE BULLETIN

SERVICE BULLETIN NO: 53-003

REF NO: 152

MODIFICATION NO:

ATA CHAPTER: 53

FUSELAGE - REAR FUSELAGE REAR PRESSURE BULKHEAD - INSPECTION AND REPAIR

1. Planning Information

A. Effectivity

PC-12 and PC-12/45 aircraft from MSN 101 thru MSN 380, MSN 382 thru MSN 385, MSN 387 thru MSN 395, MSN 398 thru MSN 406, MSN 408, MSN 409, MSN 413, MSN 415 and MSN 417.

Revision 1. to this Service Bulletin (SB) changes Para D (Repair) from a summary of repair into a given repair procedure. No technical changes are given. Tables of the necessary tools and materials are also included as well as minor changes to the SB format.

It is not necessary to obey the instructions given in Revision 1. of this SB in Post-53-003 aircraft.

B. Concurrent Requirements

None.

C. Reason

(1) Problem

It is possible that drill and rivet reaction-tool damage (nicks and scratches) could have occurred in areas around the edges of the rear pressure dome. This could have occurred during assembly procedures in some PC-12 and PC-12/45 aircraft. The damage locations are adjacent to the intersections of the rear pressure dome and the related stringers and longerons. This type of damage could also occur on the rear surface of the pressure dome at locations adjacent to the fuselage drain holes in this area. Although the damage has usually occurred on the rear surface of the pressure dome, it is possible to find similar damage on the forward surface.

(2) Cause

Incorrect drill and rivet installation procedures during assembly of the fuselage and the tail cone.

(3) Solution

(a) Inspection

Do a one time inspection of the pressure dome for drill and/or reaction tool damage. Inspection findings (also in case of no damage found) must be reported to PILATUS.

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(b) Repair - Blend and Polish (If Necessary)

Do repairs as given in Sect 3, Para D. Do this as necessary for the given condition of the pressure dome in the aircraft.

If necessary make polyester mastic (pre-repair) moulds (molds) to simulate the damaged areas in the pressure dome. Do blend and polish repairs to remove the areas of damage. Make (post-repair) molds to simulate the same areas after they are repaired. Send the molds to PILATUS. Three-dimensional co-ordination equipment is used by PILATUS to measure the molds. The molds are used as records of the damage and subsequent repairs, if required.

It is recommended that repair work is done by personnel who are trained and approved by PILATUS.

(c) Verification (If Necessary)

Within 90 days of the repair date you must get from PILATUS a final authority approved disposition paper with the final decision. If you do not receive the disposition paper within the 90 day period, the aircraft is restricted to unpressurized flight only. This is only necessary if you do a repair in which metal is removed to a depth of more than 0.008 in. (0,2 mm).

D. Description

This SB gives the data and instructions necessary to:

- Do a one time inspection of the pressure dome for drill and/or reaction tool damage
- Do the repair procedures, if necessary.
- Get authority approved verification of the repair from PILATUS within 90 days. This is only necessary if metal was removed to a depth of more than 0.008 in. (0,2 mm) during repair procedures

E. Compliance

Mandatory.

- (1) The inspection procedure (Ref. Sect 3, Para C) must be done at the next annual inspection, but not later than Dec. 31/02.

PILATUS must be told immediately if (after visual inspection) damage other than that specified in Sect 3, Para C, has occurred in the inspection areas. Pressurized flight is not permitted if crack damage is found.

- (2) If drill or reaction tool damage is found during the inspection procedure, the repair procedures (Ref. Sect 3, Para D) must be done not more than 90 days from the date of the inspection procedure, but not later than Mar. 31/03.

PILATUS must be told immediately if (after dye-penetrant flaw detection tests) cracks are found in the inspection areas. Pressurized flight is not permitted if crack damage is found.

- (3) If you do a repair in which metal was removed to a depth of more than 0.008 in. (0,2 mm) you can operate the aircraft unlimited for 90 days, but not later than Jun. 30/03. Within 90 days of the repair date you must get from PILATUS a final authority approved disposition paper with the final decision. If you do not receive the disposition paper within the 90 day period, the aircraft is restricted to unpressurized flight only.

F. Approval

The technical aspects of this SB are approved by the Federal Office for Civil Aviation (FOCA) of Switzerland as an Airworthiness Directive.

PILATUS advises Operators/Owners to check with their local Airworthiness Authorities for any changes, local regulations or sanctions that can affect the embodiment of this SB.

G. Manpower

	Total
Preparation	2.0
Inspection	2.0
Close up	3.5
TOTAL MAN-HOURS	7.5

NOTE: The man-hour quantities do not include repair procedure times which will usually be different between given aircraft.

H. Weight and Balance

(1) Weight Change

Not affected.

(2) Moment Change

Not affected.

I. Electrical Load Data

Not changed.

J. Software

Not changed.

K. References

Aircraft Maintenance Manual (AMM), 06-20-00, 25-23-01 and 25-23-02.

Illustrated Parts Catalog (IPC),

Technical Memo (TM), ECE-12-TM-02-213 (SB 53-003, Repair Procedure, Detail Information).

L. Publications Affected

Not applicable.

M. Interchangeability of Parts

Not applicable