# **SERVICE BULLETIN**

SERVICE BULLETIN NO: 57-006 REF NO: 100

MODIFICATION NO: ATA CHAPTER: 57

## WINGS - CENTER WING - INSPECTION AND MODIFICATION OF THE MAIN-SPAR DIHEDRAL FITTINGS

## 1. Planning Information

## A. Effectivity

All PC-7 aircraft from MSN 101 thru MSN 618 that have logged more than 3000 flying hours or have been in service 10 years or more.

## B. Concurrent Requirements

None

## C. Reason

#### (1) Problem

Cracks have been found in the flanges of the wing dihedral fittings on some aircraft. All of the aircraft on which the cracks were found had logged more than 3000 flying hours or had been in service 10 years or more.

#### (2) Cause

The cause of the cracks is stress corrosion.

#### (3) Solution

Do an inspection of the left and right forward and aft dihedral fittings (P/N:111.34.07.469/470/471/472) for cracks.

If an aft dihedral fitting has no cracks, a modification (bolt change) must be embodied at the earliest opportunity to remove residual stress and prevent cracks caused by stress corrosion. Corrosion inhibitor must be applied to keep moisture out and help to prevent cracks.

#### D. Description

This Service Bulletin gives the data and instructions necessary to:

- Do a one time Impedance-Plane Eddy-Current Inspection of the aft dihedral fittings
- Do a one time Radiographic Inspection of the forward dihedral fittings
- Do a modification of the aft dihedral fitting (bolt holes) if no cracks are found in this fitting
- Record the results (measurements of damaged/cracked fitting) on the data sheet given with this Service Bulletin

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 1 of 20



The fittings must be inspected at regular intervals as given in the Aircraft Maintenance Manual (AMM) 05-10-00. It is not necessary to do repeat inspections if the bolt hole modification has been embodied or if you install new fittings P/N: 557.10.09.071 or 557.10.09.072.

The minimum operator level necessary for the inspection procedures is NDI/NDT Level 2 and Radiographic Inspection (RI) or equivalent.

Revision 1. to this Service Bulletin changes the quantity of Materials to be Purchased. This makes sure that Operators know that the quantity given is for one aft fitting. There are two aft fittings per aircraft. It is necessary to modify an aft fitting only if no cracks are found in the fitting.

Revision 2 to this Service Bulletin:

- Adds a check of the grip length of the replacement bolts when aft bolt holes are modified.
- Changes the time at which the bolt hole modification must be embodied for fittings in which all four bolt holes have no cracks. But if the modification is not embodied, the repeat inspections must be done at the intervals given in AMM, 05-10-00, Page Block 1.
- · Changes the contents of the Material to be Purchased and the Operator Supplied Tools.
- · Changes the Part Number of the replacement washer.

Revision 3 to this Service Bulletin changes the Part Numbers of the modified bolts (2nd Oversize).

## E. Compliance

Mandatory.

Inspection required within the next 6 calendar months after the effective date of this Service Bulletin, unless already accomplished.

Modification of aft dihedral fittings (with no cracks in all four bolt holes) must be embodied at the earliest opportunity where manpower and facilities are available, but no later than twelve (12) months after the effective date of this Service Bulletin.

## F. Approval

The technical aspects of this Service Bulletin have been approved by the Federal Office for Civil Aviation (FOCA) of Switzerland as an Airworthiness Directive.

**NOTE:** PILATUS advises Operators/Owners to check with their local Airworthiness Authorities for any changes, local regulations or sanctions that may affect the embodiment of this Service Bulletin.

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 2 of 20

# ■PILATUS PC-7 SERVICE BULLETIN

## G. Manpower

	Total without modification to aft fittings	Total with modification to aft fittings
Preparation	4	4
Inspection	5	5
Modification to serviceable aft fittings	X	20
Close up	3	3
TOTAL MAN-HOURS	12	32

## H. Weight and Balance

(1) Weight Change

None.

(2) Moment Change

None.

## I. Electrical Load Data

Not changed.

## J. Software

Not changed.

## K. References

AMM, 05-10-00, 07-00-00, 08-00-00, 12-00-00, 12-11-28 and 32-30-00.

Structural Repair Manual (SRM), 51-10-02.

## L. Publications Affected

AMM, 57-10-00 and 57-10-01.

## M. Interchangeability of Parts

Not affected.

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 3 of 20



## 2. Material Information

## A. Materials Necessary for Each Aircraft

## (1) Materials to be Purchased

These items, which are installed at the aft fittings, are only necessary if the aft dihedral fitting has no cracks in the upper or lower flanges:

		1				
New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
557.10.09.056	Modified Bolt (Lower) 1st Oversize	932.19.60.807	2 each fitting	D	5	5
557.10.09.057	Modified Bolt (Lower) 1st Oversize	932.19.60.807	1 each fitting	D	5	6
557.10.09.058	Modified Bolt (Upper) 1st Oversize	933.74.20.014	2 each fitting	D	5	2
557.10.09.059	Modified Bolt (Upper) 1st Oversize	933.74.20.014	1 each fitting	D	5	1
938.78.11.203	Washer, Flat	938.77.11.112	4 each fitting	D	5	3
938.09.14.703	Nut	938.07.68.204	4 each fitting	D	5	4
The bolts which follow are necessary only if the bolts holes are damaged and you ream the bolt holes to the second oversize						
557.10.09.096	Modified Bolt (Lower) (2nd Oversize)	932.19.60.807	2 each fitting	D	5	5
557.10.09.097	Modified Bolt (Lower) (2nd Oversize)	932.19.60.807	1 each fitting	D	5	6
557.10.09.098	Modified Bolt (Upper) (2nd Oversize)	933.74.20.014	2 each fitting	D	5	2
557.10.09.099	Modified Bolt (Upper) (2nd Oversize)	933.74.20.014	1 each fitting	D	5	1

**NOTE:** The parts given above are sufficient to modify one aft-dihedral fitting.

**NOTE:** Bolts are supplied for two grip lengths. The result is that one upper and one lower bolt will not be installed.

Operators who have already ordered and received modified bolts (2nd oversize) 557.10.09.076, 557.10.09.077, 557.10.09.078 or 557.10.09.079 must send them back to PILATUS. PILATUS will send the new modified bolts as replacements.

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 4 of 20



## (2) Operator Supplied Materials

Part No.	Description	Qty	Remarks
908.18.12.080 or 908.18.12.085	Dinitrol AV 30 (water-displacing corrosion preventative)	A/R	Material Item No. P10-005C (MIL-C-16173). Part No. 908.18.12.080 is a 20 liter container. Part No. 908.18.12.085 is a 400 ml aerosol spray.
-	Isopropyl Alcohol	A/R	Material Item No. P01-011 (or equivalent)
910.02.05.031	Epoxy Primer, Yellow	A/R	Material Item No. P07-007
910.02.05.032	Hardener (for epoxy primer)	A/R	Material Item No. P07-007A
904.49.73.004	Cleaning Cloth (lint free)	A/R	Material Item No. P02-003
910.31.20.040	Corrosion Preventative - Mastinox 6856H	A/R	Material Item No. P04-012

## B. Tooling - Cost and Availability

## (1) Tools to be Procured

Tool Kit No. 513.57.09.085, one for each customer if the aft dihedral fitting has no cracks, which has these parts:

Part No.	Description	Qty	Remarks
513.57.09.086	Reamer, Hand Dia 5,044/5,070 mm	1	To ream aft left and right dihedral-fittings (1st oversize)
513.57.09.078	Reamer, Hand Dia 5,440/5,466 mm	1	To ream aft left and right dihedral-fittings (2nd oversize)
901.61.04.024	Drill, Special Short	1	Dia. 2,4 mm, titanium-tipped
901.61.04.030	Drill, Special Short	1	Dia. 3,0 mm, titanium-tipped
513.57.09.071	Piloted Drill	1	Dia. 4,8 mm / 3.0 mm
902.41.28.405	Carbide Burr	1	For countersunk bolts only

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 5 of 20



## (2) Operator Supplied Tools

Part No.	Description	Remarks
N/A	Eddy Current NDT Equipment	Hocking Quick Check Eddy Current Instrument or equivalent
N/A	Shielded Probe and Lead Combination	3 mm Diameter, 500 KHz, 90-degree
N/A	Bolthole Probe and Lead Combination	5 mm Diameter, 500 KHz
N/A	Calibration Standard	2024T351 Aluminium Block 50 mm x 25mm x 4 mm with an EDM slot 0.5 mm deep
N/A	Approved Marking Pen	
N/A	Portable Philips 160KV X-ray generator with focal spot size not more than 1,5 mm	Or equivalent generator
N/A	Agfa D7Pb Vacupac 10 cm x 40 cm (CUT IN HALF)	Or equivalent
N/A	Masking Tape	
N/A	Film viewing equipment	
N/A	Radiation Survey meter	
N/A	Personal monitor and thermoluminescent dosimeter	
N/A	Automatic or manual film development facility	
N/A	Depth Gauge or Hi-Tigue Grip Length Gauge	To measure depth with a precision of 0,1 mm

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 6 of 20



## 3. Accomplishment Instructions - Aircraft

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS.

## A. Preparation

- (1) Defuel and drain the left and right wing fuel-tanks (Ref. AMM, 12-11-28, Page Block 301).
- (2) Raise the aircraft on jacks (Ref. AMM, 07-00-00, Page Block 1).
- (3) Make the aircraft level (Ref. AMM, 08-00-00, Page Block 1).
- (4) Retract the landing gear sufficiently to get access to the aft dihedral fittings (Ref. AMM, 32-30-00, Page Block 201).
- (5) Remove panels LB3 and RB3 (Ref. AMM, 12-00-00, Page Block 1).
- (6) Clean the flanges of the left and right, upper and lower aft-dihedral fittings with lint free cloth (Item No. P02-003) and isopropyl alcohol (Item No. P01-011) or other approved solvent.
- B. Eddy Current Inspection of the Aft Dihedral Fitting Flanges (8 Locations) (Ref. Fig. 1)

CAUTION: EDGE EFFECT AND PART GEOMETRY CAN CAUSE A DEFECT INDICATION.

- (1) Calibrate the Eddy Current Instrument as follows:
  - (a) Initial gain 35 Db.
  - (b) Frequency 500 KHz.
  - (c) Alarm low OFF.
  - (d) Alarm high 50%.
  - (e) Probe selection Absolute.
- (2) Refer to the manufacturer's handbook and calibrate the instrument for an 80% upscale deflection from the 0.5 mm EDM slot of the calibration standard.
- (3) Put the probe on the inspection surface of the lower inboard flange of the left aft dihedral-fitting. Put the probe so that it touches the washer of the fastener at the 6 o'clock position (Ref. Fig 1, Detail B).
- (4) Do the balance procedure as given in the manufacturer's handbook.
- (5) From the 6 o'clock position, do a scan around the fastener of the bottom flange. Use the washer as guide. Defect indications will show as a fast upscale movement of the indicator.
- (6) Record the results of the inspection (Ref. Para. C).

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 7 of 20



- (7) Do Steps (3) thru (6) again for a scan of the:
  - · top inboard flange of the left aft dihedral-fitting
  - upper and lower outboard flanges of the left aft dihedral-fitting.
  - upper and lower, inboard and outboard flanges of the right aft dihedral-fitting.

## C. Defect Data for Eddy Current Inspection of the Aft Dihedral Flanges (Ref. Fig. 1 and 2)

(1) A defect indication in a fitting that can be repeated and is not caused by edge effect or part geometry and is not in the permitted-crack-damage area is not permitted.

Do not fly the aircraft until PILATUS has made an analysis of the results. PILATUS will make a decision on the repair, replacement or inspection frequency necessary for each aircraft.

- (2) If the inspection shows no defects or defect(s) only in the permitted crack-damage area of the aft fittings:
  - (a) Make an entry in the Aircraft Logbook that the brackets have had an Impedance-Plane Eddy-Current Inspection.
  - (b) Repeat inspections of the bolt holes are necessary (Ref. AMM 05-10-00, Page Block 1).
- (3) If the inspection shows no defects in all four bolt holes, the aft dihedral-fitting bolt-holes must be modified at the earliest servicing opportunity (Para. D). This modification will prevent the start of stress corrosion cracks. It is not necessary to do repeat inspections of the bolt holes after modification.
- (4) Use the Inspection Report Form (Figure 3) to tell the result of the inspection to PILATUS (Ref. Para.I).

#### D. Modification of the Aft Dihedral Fitting and Spar-Cap Bolt Holes (Ref. Fig. 5)

Only do this modification to aft dihedral fittings at locations which have no cracks in the flanges. The modification removes high remaining stress from around the bolt holes so that stress corrosion will not start.

This procedure is only applicable to a left and right aft-dihedral fitting in which all four bolt holes (two upper and two lower) have no cracks.

(1) Remove and discard the nuts (4) and washers (3).

**CAUTION:** DO NOT USE A DRIFT TO REMOVE DAMAGED, BENT OR VERY TIGHT BOLTS IN THE DIRECTION OF THE WING EXTERNAL SKIN. REMOVAL OF SUCH BOLTS IN THIS DIRECTION CAN CAUSE DAMAGE TO THE SKIN.

- (2) Remove the two bolts from the upper flange and the two bolts from the lower flange of the aft dihedral fitting as follows:
  - (a) Put protective covers on the wing external surface, specially in the area around the upper and lower flange bolts.
  - (b) Use an applicable drift and carefully punch the bolts (1), (2), (5) and (6) until the threaded end of the bolt is flush with the fitting flange. Make sure the drift has no sharp edges. Use different length drifts as necessary to prevent damage to the wing skin until you can remove the bolts.

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 8 of 20



- (c) Do Step (3) of this procedure if it is too difficult to remove the bolts with a punch.
- (3) Remove bolts which could not be removed in Step (2), as follows:

**CAUTION:** MAKE SURE THE RECESS YOU MAKE IS IN THE CENTER OF THE BOLT HEAD.

- (a) Use a carbide burr and carefully grind the screwdriver slots from the countersunk bolt heads.
- (b) Drill the heads from the bolts. Start with the 2,4 mm titanium-tipped drill, then the 3,0 mm titanium-tipped drill and complete the task with the 4,8 mm piloted drill. Do not damage the countersink in the wing skin.
- (c) Use an applicable drift and carefully punch the bolts through the spar and the flange of the dihedral fitting.
- (4) Use the reamer (P/N: 513.57.09.086) to increase the diameter of the bolt holes to between 5,044 and 5,070 mm (0.1986 and 0.1996 in.).
- (5) Make sure the holes in the fitting have no sharp edges. Remove burrs as necessary and remove unwanted material from the fitting.
- (6) Do the Impedance-Plane Eddy Current Inspection of the bolt holes in the flanges (Para. E).
- (7) Measure the grip length of the aft fitting lower-bolt-holes to find which replacement bolt to install
  - (a) If the grip length is equal to or greater than 25,2 mm, use bolt P/N: 557.10.09.056.
  - (b) If the grip length is less than 25,2 mm, use bolt is P/N: 557.10.09.057.
- (8) If the aft fitting lower-bolt-hole is damaged, install the next oversize bolt
  - (a) Use a reamer (P/N: 513.57.09.078) to increase the diameter of the bolt holes to between 5,440 and 5,466 mm (0.2142 and 0.2152 in.)
  - (b) Measure the grip length of the aft fitting lower-bolt-holes to find which replacement bolt to install
    - (i) If the grip length is equal to or greater than 25,2 mm, use bolt P/N: 557.10.09.096.
    - (ii) If the grip length is less than 25,2 mm, use bolt P/N: 557.10.09.097.
    - (iii) Make sure the holes in the fitting have no sharp edges. Remove burrs as necessary and remove unwanted material from the fitting.
    - (iv) Do the Impedance-Plane Eddy Current Inspection of the bolt holes in the flanges (Para. E).

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 9 of 20



- (9) Measure the grip length of the aft fitting upper-bolt-holes to find which replacement bolt to install
  - (a) If the grip length is equal to or less than 27,0 mm, use bolt P/N: 557.10.09.058.
  - (b) If the grip length is greater than 27,0 mm, use bolt P/N: 557.10.09.059.
- (10) If the aft fitting upper-bolt-hole is damaged, install the next oversize bolt
  - (a) Use a reamer (P/N: 513.57.09.078) to increase the diameter of the bolt holes to between 5,440 and 5,466 mm (0.2142 and 0.2152 in.).
  - (b) Measure the grip length of the aft fitting lower-bolt-holes to find which replacement bolt to install
    - (i) If the grip length is equal to or less than 27,0 mm, use bolt P/N: 557.10.09.098.
    - (ii) If the grip length is greater than 27,0 mm, use bolt P/N: 557.10.09.099.
    - (iii) Make sure the holes in the fitting have no sharp edges. Remove burrs as necessary and remove unwanted material from the fitting.
    - (iv) Do the Impedance-Plane Eddy Current Inspection of the bolt holes in the flanges (Para. E).
- (11) Obey the manufacturer's instructions and apply corrosion preventative (Item No. P04-012) to the shanks of the new bolts (1), (2), (5) and (6).
- (12) Install the new bolts (1), (2), (5) and (6).
- (13) Install the new washers (3) and nuts (4). Torque the nuts (4) to between 4,0 and 5,0 Nm (35 to 45 lbf in.).
- (14) Clean unwanted sealant from the bolt head, nut and washer.
- (15) Repair the surface finish (clean, then apply primer and top coat) as necessary at the heads of the bolts (Ref. SRM, 51-10-02).
- (16) Apply Dinitrol AV 30 (Item No. P10-005C, liquid or spray) to the nuts (4) and washers (3) and to the upper and lower flanges of the aft dihedral fittings.

**NOTE:** This will give protection against corrosion.

## E. Eddy Current Inspection of the Aft-Dihedral-Fitting Bolt Holes (Ref. Fig. 6)

This procedure is applicable to the 4 bolt holes in each fitting, which were reamed out in Para. D.

- (1) Calibrate the Eddy Current Instrument as follows:
  - (a) Initial gain 35 Db.
  - (b) Frequency 500 KHz.
  - (c) Alarm low OFF.
  - (d) Alarm high 40%.

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 10 of 20



- (e) Probe selection Absolute.
- (2) Refer to the manufacturer's handbook and calibrate the instrument for an 80% upscale deflection from the 0.5 mm EDM slot of the calibration standard. Use the 5 mm diameter bolthole probe.
- (3) Put the probe inside one of the holes in the aft flange of the dihedral fitting.
- (4) Point the coil of the probe forward. Push the probe slowly down the hole and monitor for defect indications. A defect indication will be given at each material interface.
- (5) A lift off indication will be given as the coil goes completely through the dihedral fitting. Make a mark on the shaft of the probe level with the aircraft skin to show this position.
- (6) Pull the probe back into the dihedral fitting until you get a defect indication (this will occur after approximately 4 mm (0.16 in.)). Make a mark on the shaft of the probe level with the aircraft skin to show this position.
  - **NOTE:** This defect indication is caused by the interface of the dihedral fitting and the 2 mm angle.
- (7) Remove the probe from the hole. Lock the probe collar with its lower surface in the middle of the two marks made at Step (5) and (6).
  - NOTE: This will set the depth of the coil to scan the center of the dihedral fitting.
- (8) Point the probe coil forward and put the probe back into the hole until the probe collar touches the aircraft skin.
- (9) Do the balance procedure as given in the manufacturer's handbook. If the probe is not approximately balanced, do Steps (3) thru (9) again until the probe balances correctly.
- (10) Carefully turn the probe in the hole. Make sure the probe stays normal to the aircraft wing surface and do a scan around the bolt hole. Defect indications will show as a fast upscale movement of the indicator. Defect indications will normally be across the wing span.
- (11) Record the result of the inspection (Ref. Para.F).
- (12) Do Steps (3) thru (11) again for a scan of each bolt hole in the serviceable aft-dihedral fittings.

## F. Defect Data for Eddy Current Inspection of the Aft Dihedral-Fitting Bolt Holes (Ref. Fig. 3)

- (1) Use the Inspection Report Form (Figure 3) to tell the result of the inspection to PILATUS (Ref. Para. I).
- (2) Fittings with a defect indication that can be repeated:
  - Do not fly the aircraft until PILATUS has made an analysis of the results. PILATUS will make a decision on the repair, replacement or inspection frequency necessary for each aircraft.

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 11 of 20



G. Radiographic Inspection of the Forward Dihedral Fittings (Ref. Fig. 7)

WARNING: RADIATION FROM AN X-RAY GENERATOR IS DANGEROUS. IT CAN CAUSE

INJURY TO PERSONNEL.

WARNING: OBEY ALL APPLICABLE RADIATION SAFETY PRECAUTIONS.

WARNING: RADIOGRAPHIC PERSONNEL MUST WEAR A PERSONAL MONITOR AND

THERMOLUMINESCENT DOSIMETER.

CAUTION: X-RAY TUBEHEAD POSITION IS VERY IMPORTANT. IF THE TUBEHEAD IS

NOT IN THE CORRECT POSITION, YOU CAN GET INCORRECT RESULTS.

(1) Set the safety barriers around the aircraft (Refer to Manufacturers Instructions and local instructions).

- (2) Put the X-ray equipment in position on the aircraft. Align the X-ray tubehead against the wing, so that it is 25 mm from the forward-dihedral-bracket fastener in the direction of the span.
- (3) Make sure there are no personnel in the radiographic danger area.
- (4) Use the Exposure Table 1 to expose the films, to get a density of between 1.5 and 2.5 adjacent to the fastener to be inspected.

Exposure No.	Position	KV	mA	Time in Minutes	SOD	Film Type
1	Left lower inboard	100	4	1,5	Nil	D7 Pb 20 cm x 10 cm
2	Left lower outboard	100	4	1,5	Nil	D7 Pb 20 cm x 10 cm
3	Left upper inboard	100	4	1,5	Nil	D7 Pb 20 cm x 10 cm
4	Left upper outboard	100	4	1,5	Nil	D7 Pb 20 cm x 10 cm
5	Right lower inboard	100	4	1,5	Nil	D7 Pb 20 cm x 10 cm
6	Right lower outboard	100	4	1,5	Nil	D7 Pb 20 cm x 10 cm
7	Right upper inboard	100	4	1,5	Nil	D7 Pb 20 cm x 10 cm
8	Right upper outboard	100	4	1,5	Nil	D7 Pb 20 cm x 10 cm

Forward Dihedral Fitting - Exposure Table Table 1

- (5) When the X-ray inspection is complete:
  - · Remove the barriers from around the aircraft
  - · Remove the X-ray equipment
- (6) Record the result of the inspection (Ref. Para. H).

## H. Defect Data for Radiographic Inspection of the Forward Dihedral Flanges (Ref. Fig. 4)

- (1) Use the Inspection Report Form (Fig. 4) to tell the result of the inspection to PILATUS (Ref. Para. I).
- (2) All dihedral fittings with a crack indication

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 12 of 20



- · Reject fittings with a crack indication.
- Do not fly the aircraft until PILATUS has made an analysis of the results. PILATUS will make a decision on the repair, replacement or inspection frequency necessary for each aircraft.

#### I. Report of Inspection Results (Ref. Fig. 3 and Fig. 4)

(1) Use a **photocopy** of the Inspection Report Forms (Fig. 3 and Fig. 4) to show the location and length of cracks if found. If an aircraft has a fitting with no crack indication, use the Inspection Report Form to tell Pilatus the aircraft details. Give as many of the aircraft details as are known and send or fax the completed form(s), to

PILATUS AIRCRAFT LTD., MCT, PC-7 Technical Support Department 6371 STANS, SWITZERLAND Fax No. + 41 41 610 33 51

## J. Close up

- (1) Extend the landing gear and make sure that it is fully down and locked (Ref. AMM, 32-30-00, Page Block 201).
- (2) Install panels LB3 and RB3 (Ref. AMM, 12-00-00, Page Block 1).
- (3) Lower the aircraft to the ground (Ref. AMM, 07-00-00, Page Block 1).
- (4) Refuel the aircraft (Ref. AMM, 12-11-28, Page Block 301).
- (5) Remove all tools and materials from the work area. Make sure the work area is clean.

## K. Documentation

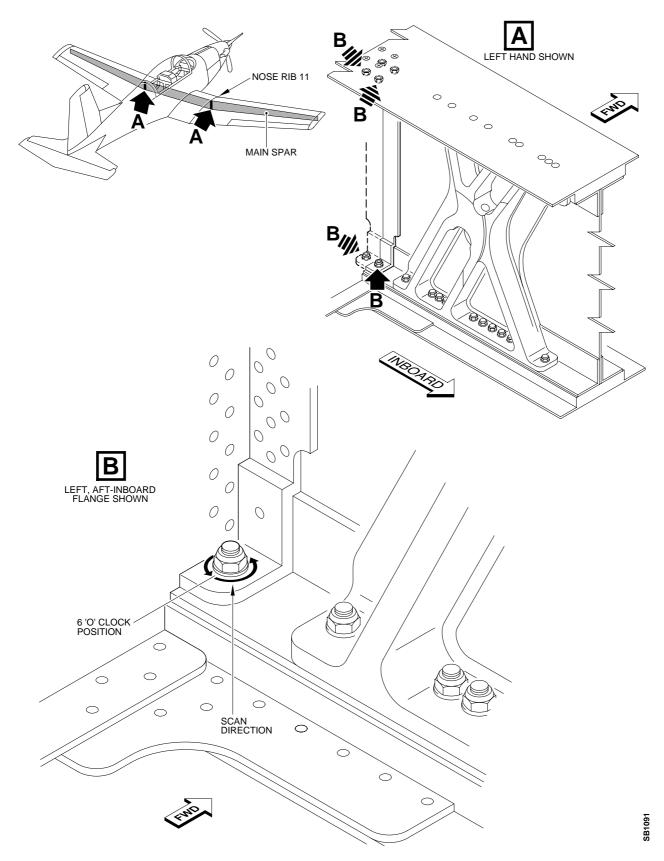
(1) Make an entry in the Aircraft Logbook that this Service Bulletin has been incorporated.

## 4. Accomplishment Instructions - Spares

Not applicable.

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 13 of 20

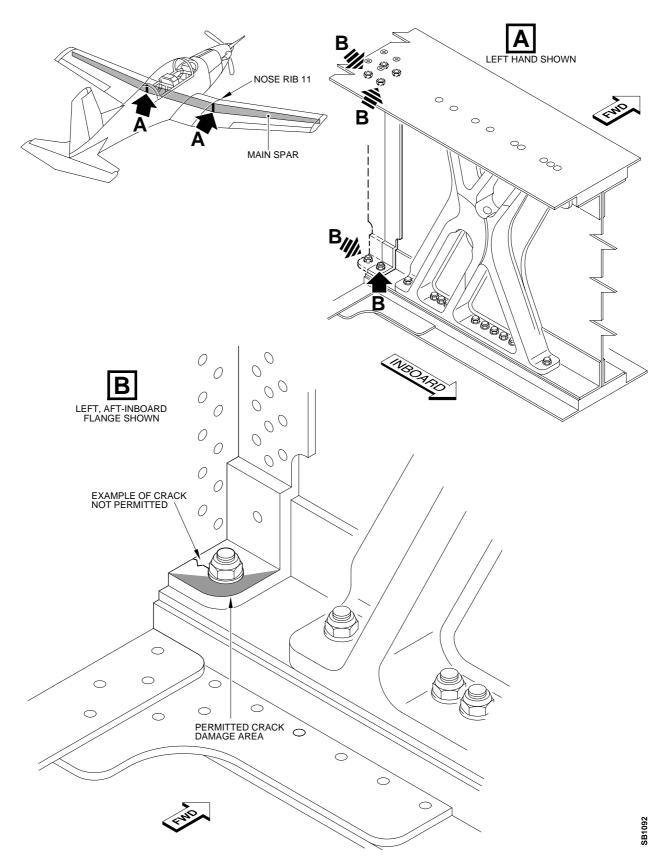
# ■PILATUS■ PC-7 SERVICE BULLETIN



Eddy Current Inspection of the Wing Aft-Dihedral Fittings - Surface and Scan Path Data Figure 1

**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 14 of 20

# ■PILATUS ■ PC-7 SERVICE BULLETIN

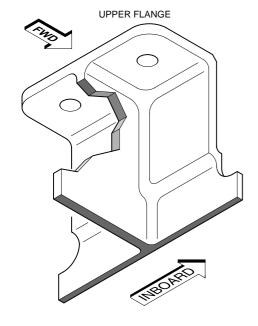


Eddy Current Inspection of the Wing Aft-Dihedral Fittings - Permitted Crack Damage Area Figure 2

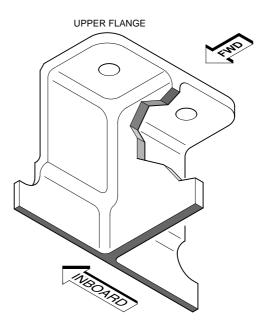
**DATE**: Nov 29/01 **SERVICE BULLETIN No.** 57-006 **REV No.** 3 Jan 15/03 **PAGE** 15 of 20

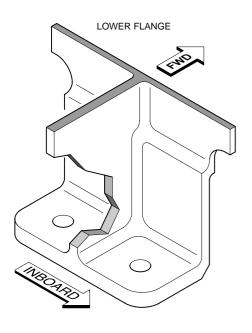
# ■PILATUS■ PC-7 SERVICE BULLETIN

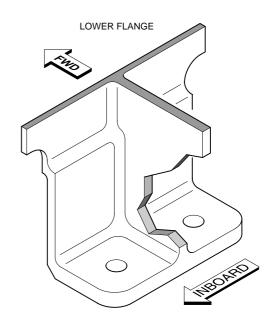
#### AFT LEFT DIHEDRAL FITTING



#### AFT RIGHT DIHEDRAL FITTING







DATE:	AIRCRAFT MSN:	FLYING HOURS:	

B1089

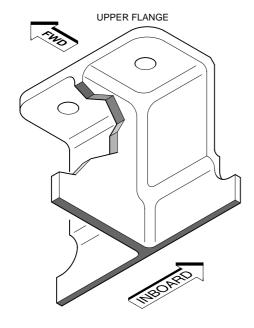
Aft Dihedral Fittings - Inspection Report Form (Eddy Current) Figure 3

**DATE:** Nov 29/01 **REV No.** 3 Jan 15/03

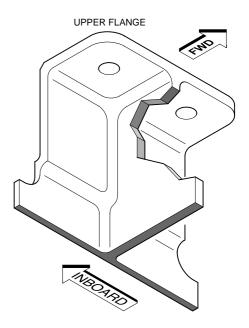
SERVICE BULLETIN No. 57-006 PAGE 16 of 20

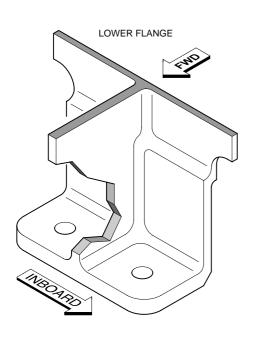
## **■**PILATUS SERVICE BULLETIN

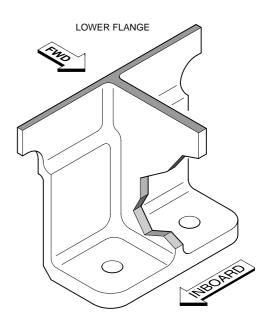
## FORWARD RIGHT DIHEDRAL FITTING



## FORWARD LEFT DIHEDRAL FITTING







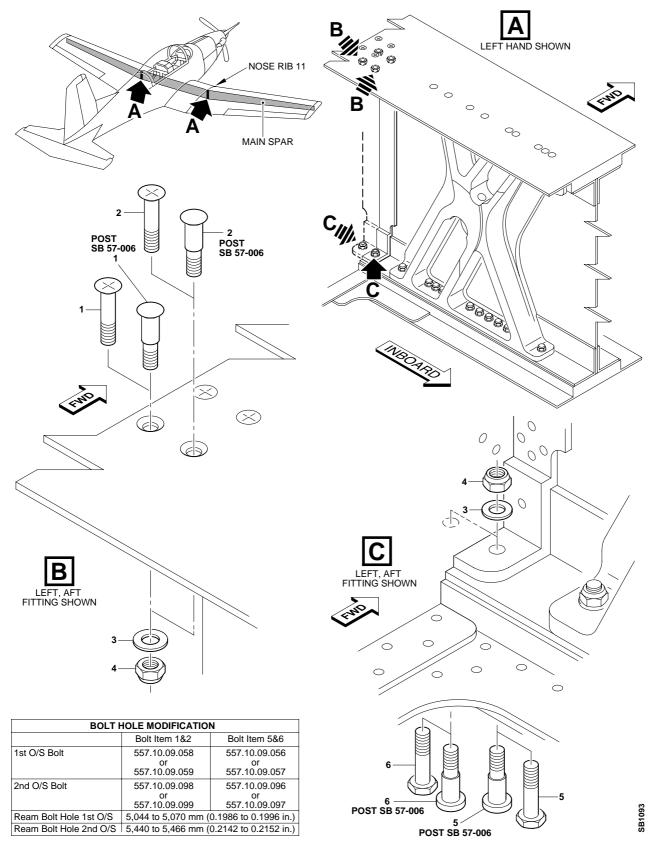
DATE:	AIRCRAFT MSN:	FLYING HOURS:

Forward Dihedral Fittings - Inspection Report Form (Radiographic) Figure 4

DATE: Nov 29/01 SERVICE BULLETIN No. 57-006 **REV No.** 3 Jan 15/03

**PAGE** 17 of 20

# ■PILATUS■ PC-7 SERVICE BULLETIN

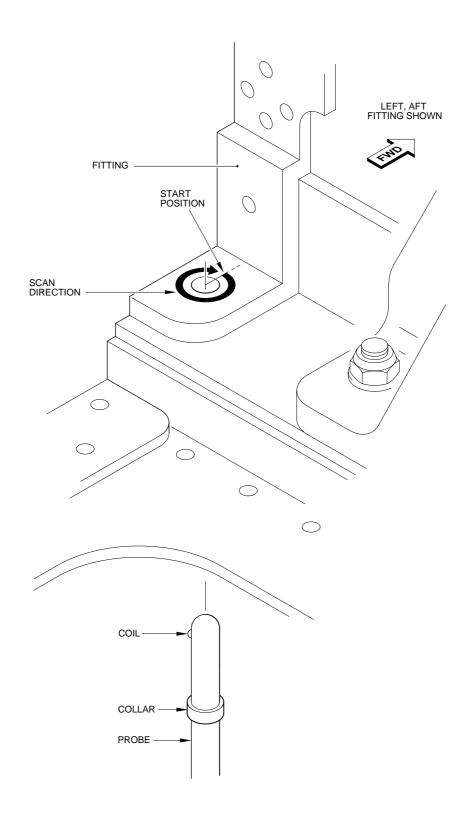


Aft Dihedral Fittings - Modification Figure 5

**DATE:** Nov 29/01 **REV No.** 3 Jan 15/03

SERVICE BULLETIN No. 57-006 PAGE 18 of 20



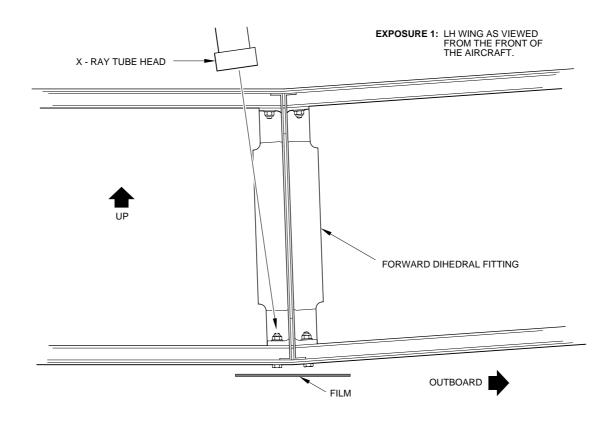


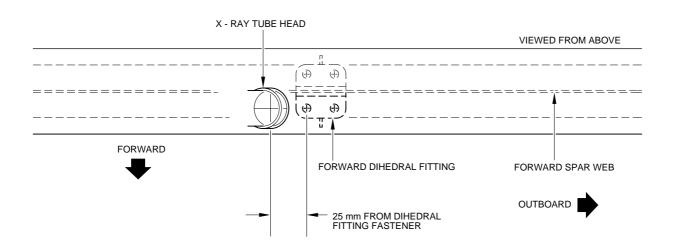
SB1110

Eddy Current Inspection of the Wing Aft-Dihedral-Fitting Bolt-Holes - Scan Path Data Figure 6

**DATE:** Nov 29/01 **REV No.** 3 Jan 15/03







Forward dihedral Fitting - X-ray Inspection Areas and Beam Position Figure 7

**DATE:** Nov 29/01 **REV No.** 3 Jan 15/03

SERVICE BULLETIN No. 57-006 PAGE 20 of 20