 <p>Bundesamt für Zivilluftfahrt (BAZL) Office fédéral de l'aviation civile (OFAC) Ufficio federale dell'aviazione civile (UFAC) Federal Office for Civil Aviation (FOCA) 3003 Bern/Berne/Berna</p>	<p>Lufttüchtigkeitsanweisung Consigne de navigabilité Prescrizione di aeronavigabilità Airworthiness directive</p>	<p>HB 91-143</p>
<p>Inkraftsetzung Date en vigueur Entrata in vigore 14.5.1991 Effective Date</p>		

Betroffene Muster – Types concernés – Applicabilità – Models affected

All Pilatus PC-7 aircraft

Anlass/Massnahmen – Objet/Mesures – Oggetto/Provvedimenti – Subject/Action

Main Landing Gear (MLG) - Cracks in the main leg housing - Inspection and repair, if necessary

Fristen – Délais – Scadenza – Compliance

In accordance with Service Bulletin; the effective date on this page is applicable

Herkunft – Provenance – Provenienza – Origin

Pilatus Aircraft Ltd.

Bezugnahme – Référence – Riferimento – Reference

Pilatus Service Bulletin (SB) PC7-32-013, Ref. No. 068

Bemerkungen – Observations – Osservazioni – Remarks

"Planning Information" of SB PC7-32-013, pages 1-5 are attached

Rechtsmittelbelehrung siehe TM Nr.
Voies de droit voir CT no. F 80.015-10
Rimedi giuridici vedi CT no.
Right to appeal see TC no.

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PILATUS AIRCRAFT LTD CH-6370 STANS SWITZERLAND

SERVICE BULLETIN

SERVICE BULLETIN NO: PC7-32-013

REF NO: 068

MODIFICATION NO:

ATA CHAPTER: 32

LANDING GEAR - CRACKS DETECTED IN MAIN LEG HOUSING

1. Planning Information

A. Effectivity

- (1) All PC-7 Aircraft
- (2) The following spares:
 - Landing Gear Shock Strut (LH) - Part Number 114.35.07.021
 - Landing Gear Shock Strut (RH) - Part Number 114.35.07.022
 - Cylinder inc Bushing (LH) - Part Number 114.35.07.023
 - Cylinder inc Bushing (LH) - Part Number 114.35.07.024
- (3) This Service Bulletin will be incorporated prior to delivery on aircraft MSN 576 and subsequent.

B. Reason

During a heavy landing inspection on a PC-7 aircraft, cracks were found in the leg housings of the main landing gear. The cracks were found in the fabricated part of the leg housing, in the welded seams at the upper axle attachment points (Ref. Fig. 1.).

Subsequent inspections of a number of PC-7 aircraft as a result of this development, have confirmed other cases of cracks in the same location.

The cracks can be extremely difficult to detect, and it is not possible to do an "in situ" inspection with accuracy. The main legs must be removed from the aircraft and they must be inspected using magnetic flaw detection techniques.

NOTE: The Dye Penetrant method of crack detection is not sufficiently accurate for this task.

C. Description

Accomplishment of this Service Bulletin consists of completing the following tasks:

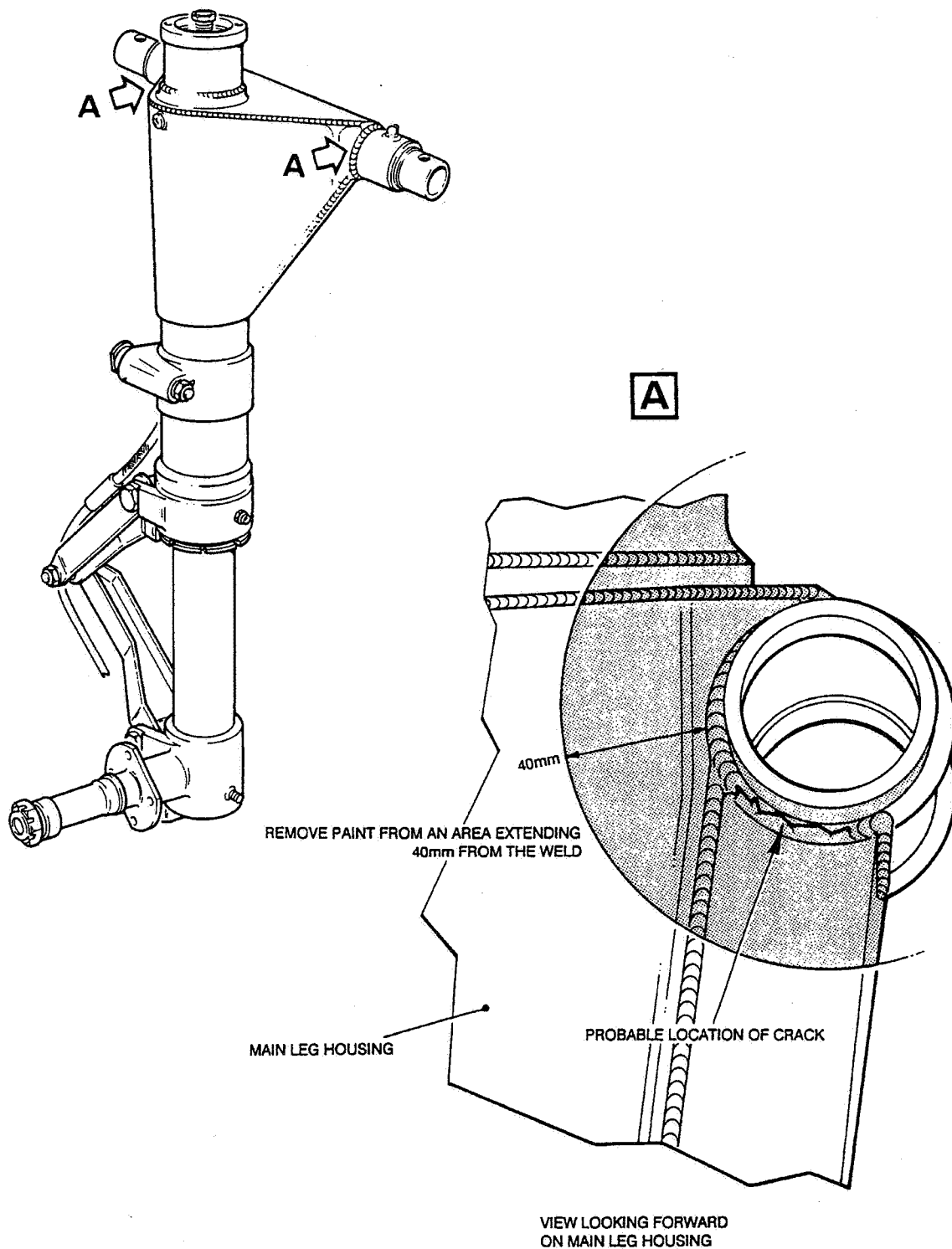
Aircraft

- (1) Support the aircraft on jacks.
- (2) Remove the mainwheels and the brake units.

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Main Landing Gear Installation - Location of Possible Cracks
Figure 1

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- (3) Remove the main landing gear from the aircraft.
- (4) Install the main landing gear on the aircraft.
- (5) Install the brake units and mainwheels.
- (6) Do an Operational Test of the landing gear.
- (7) Lower the aircraft and remove the jacks.

Bench Procedure

- (1) Remove the paint from the area to be crack-tested.
- (2) Complete the applicable magnetic flaw detection test(s).
- (3) Repair any cracks which are detected using the TIG welding process.
- (4) Repair the paint finish on the main legs.

D. Compliance

Mandatory - To be accomplished within 200 flying hours following receipt of this Service Bulletin.
- Depending on the results obtained, and unless a revision to the SB has been issued, do the following procedures as applicable.

- (i) If no cracks were found during the inspection procedure, repeat the accomplishment instructions of this SB after 1000 flying hours or 2000 landings (whichever comes first).
- (ii) If a crack was found during the inspection procedure and the repair was completed by the Operator, after a further 500 landings, repeat the instructions given in para 2C (Inspection) of the Accomplishment Instructions. If no cracks are found on this inspection, proceed as in para (i) above. If cracks are found, return the defective item(s) to Pilatus for repair.

E. 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.

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F. Manpower	Manhours
Preparation	5.0
Inspection	3.0
Repair	5.0
Installation	6.0
Test	1.0
Close-up	2.0
TOTAL MANHOURS	22.0
ELAPSED TIME (HOURS)	19.0

Manhours figures are calculated for units installed in the aircraft and represent the total time estimated for both main legs. The time required to accomplish this Service Bulletin on an item held as a spare, is obviously considerably less.

G. Material - Cost and Availability

(1) Material

Operators should send orders for Service Bulletin modification kits, to:

PILATUS AIRCRAFT LTD
PRODUCT SUPPORT DEPARTMENT
CH 6370
STANS
SWITZERLAND FAX No. 041/613 351

NOTE: Operators are requested to advise Pilatus Aircraft Ltd. of the Manufacturers Serial Number, and the flying hours and landings of aircraft which are allocated for this Service Bulletin. Please see Annexe A.

(2) Cost and Availability

Kit No.	Cost	Availability *
SB PC-7 32-013	No Charge	21

* Calendar days from receipt of order

H. Tooling

None.

I. Weight and Balance

Not Affected.

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J. References

Maintenance Manual, Chapters 7-00-00, 32-10-01, 32-30-00, 32-41-02 and 32-42-00.

K. Publications Affected

None.

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