

PNG ACCIDENT INVESTIGATION COMMISSION

OFFICE OF THE CHIEF EXECUTIVE OFFICER

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Safety recommendation: AIC 15-R06/15-1001

Addressed to: Helifix Limited

Date issued: 30 July 2015

Investigation link: AIC 15-1001

Action status: Issued

Safety deficiency/advisory description

On 15 February 2015, the pilot of a Bell 206 Long Ranger helicopter was conducting sling load operations involving moving fuel drums and an electric generator a distance of 150 metres. During a sling load release under the direction of a ground-based load master, the helicopter's engine failed. The investigation found that a small ball of non-ferrous material used in pressure blasting for cleaning/polishing during engine overhaul had become lodged in the orifice of the Pc diffuser union, effectively blocking the Pc air line.

The investigation was unable to determine when or how the ball had entered the Pc line. It is likely that the non-ferrous ball entered the Pc diffuser union during the last engine overhaul.

The blocked Pc fuel line starved the engine of fuel at a critical time of the flight.

The date of the last maintenance carried out by the operator's approved maintenance organisation was listed in the log book as 2 February 2015. The log book entry was not signed in accordance with *Civil Aviation Rule 43.105*, *Certifying release-to-service after maintenance*. The log book entries for the maintenance carried out on 2 January 2015 and 28 December 2014 also were not signed.

Recommendation AIC 15-R06/15-1001 to Helifix Limited

The Accident Investigation Commission recommends that Helifix Limited review its maintenance control recording and documentation procedures to ensure on-going compliance with the requirements of *Civil Aviation Rule 43.105*, *Certifying release-to-service after maintenance*.



Action requested

Before the AIC can close the above recommendation as fully satisfactorily addressing the safety deficiency, the AIC requests that Helifix Limited provide a response to AICrecommendation within 60 days of the issue date, and explain (including with evidence) how the Helifix Limited has addressed the safety deficiencies noted in the report AIC 15-1001 and recommendation AIC 15-R06/15-1001.

DAVID INAU, ML Chief Executive Officer

Helifix Limited response

Response dated 7 August 2015.

Helifix has carried out an investigation and review of the maintenance control recording and documentation procedures as recommended by the AIC. It has been determined that the steps 25 and 26 of the Maintenance Organisation Exposition (MOE) flowchart [supplied to AIC] indicate that "records are entered in appropriate Logbooks" by technical records staff and "require Chief Engineer or Job coordinator to make appropriate certification" in these "appropriate Log Books".

CASA verification received 16 October 2015

Helifix now has changed the MC procedures after your [AIC] initial finding.

All defects will be certified on the Tech log and or Additional worksheet prior release to service. If an aircraft/helicopter flies with open defects they are in breach of Part 43.69 and Sub Part C requirements.

However if an aircraft engine/propeller was to fly with separate open defect on the Component log book /card is not acceptable. This is provided that the same defect is NOT recorded in the Tech log. If the same defect has been signed off on the Tech log or work sheet this can be considered as Not a breach to Part 43.69.

PNG Accident Investigation Commission (AIC) assessment of Helifix Limited response

The AIC has assessed the Helifix Limited response and CASA verification of the response as satisfactorily addressing the identified safety deficiency. With respect to AIC 15-R06/13-1007 addressed to Air Niugini the **Status of the AIC Recommendation: Closed**

DAVID INAU, ML Chief Executive Officer

16 October 2015