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Our Ref: AIC 15-R05/15-1001

Safety recommendation: AIC 15-R05/15-1001

Addressed to: Civil Aviation Safety Authority of PNG

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.

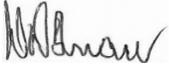
The date of the last maintenance carried out by the operator's approved maintenance organisation was listed in the log book as 2 February 2015. The log book entry was not signed in accordance with *Civil Aviation Rule 43.105, Certifying release-to-service after maintenance*. The log book entries for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

Recommendation number AIC 15-R05/15-1001 to the Civil Aviation Safety Authority of PNG

The Accident Investigation Commission recommends that the Civil Aviation Safety Authority of PNG should note the operator's maintenance certification non-compliance with the requirements of *Civil Aviation Rule 43.105, Certifying release-to-service after maintenance*, and review the operators maintenance control recording systems and documentation.

Action requested

The AIC notes the Civil Aviation Safety Authority (CASA) of PNG comment on the draft report AIC 15-1001, dated 28 July 2015, that AIC recommendation AIC 15-R05/15-1001 'no further comment'. However, before the AIC can close the recommendation as fully satisfactorily addressing the safety deficiency, the AIC requests that the CASA provide an evidence-based response to this AIC recommendation within 60 days of the issue date, and detailing how CASA has addressed the recommendation.



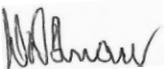
David Inau
Chief Executive Officer

Civil Aviation Safety Authority of PNG (CASA) response

Despite reminders being sent to the CASA, the AIC has not received an evidence-based response from CASA addressing the identified safety deficiency.

PNG Accident Investigation Commission (AIC) assessment of Civil Aviation Safety Authority of PNG (CASA) response

As a result of the AIC not receiving an evidence-based response from CASA addressing the identified safety deficiency with respect to AIC 15-R05/15-1001 addressed to CASA, the AIC assigned this nil response an **unsatisfactory** rating, and records the **Status of the AIC Recommendation: Active**



David Inau, ML
Chief Executive Officer

13 October 2015

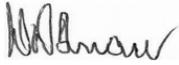
Civil Aviation Safety Authority of PNG (CASA) response

The AIC wrote to CASA on 24 November 2016 listing this among the recommendations to CASA that were still outstanding. On 29 November 2016, the Director of CASA PNG informed the AIC that:

CASA accepts this recommendation and, will issue a Safety Bulletin to the industry stressing the need for the Part 145 maintenance provider to ensure the log book entry is signed to certify release-to-service after maintenance in accordance with the Civil Aviation Rule 43.105. CASA will monitor compliance of maintenance control recording systems and documentation during organization audit and surveillance. The Safety Bulletin when issued will be forwarded to AIC.

PNG Accident Investigation Commission (AIC) assessment of Civil Aviation Safety Authority of PNG (CASA) response

The AIC has reviewed the CASA PNG response addressing the identified safety deficiency with respect to AIC 15-R05/15-1001 addressed to CASA. The AIC will monitor this safety action by CASA and the recommendation will be closed on receipt of the Safety Bulletin. The AIC assigned this response a **satisfactory intent** rating, and records the **Status of the AIC Recommendation: Monitoring**



David Inau, ML

Chief Executive Officer

7 December 2016

Civil Aviation Safety Authority of PNG (CASA) response

On 8 June 2017, the CASA Acting Manager Airworthiness issued a Safety Alert Email – AIC Rec AIC 15-R05 15-1001 to all PNG CAR Part 145 organisations. The Safety Alert Email was sent to the AIC as evidence of addressing the safety deficiency noted in the AIC recommendation. The Safety Alert Email stated:

Dear Operators,

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 carried out by PNG Accident Investigation Commission (PNG AIC) 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.

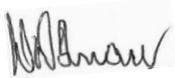
Investigation of the aircraft records revealed the date of the last maintenance carried out by the operator's approved maintenance organisation was listed in the log book as 2 February 2015. However the log book entry was not signed in accordance with Civil Aviation Rule 43.105, Certifying release-to-service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

This Safety Alert Email Notification is issued by CASA PNG to notify all Part 145 Organisations of the need to adhere to Release to Service (RTS) Standard Operating Procedures (SOPs) referred to in the existing CASA PNG AC 43-1 para. 43.105 (See attached). Failure to comply may have detrimental effect on your certificates when in such events or renewal.

The PNG AIC Safety Recommendation is also attached for your information and noting.

PNG Accident Investigation Commission (AIC) assessment of Civil Aviation Safety Authority of PNG (CASA) response

The AIC has reviewed the CASA PNG response addressing the identified safety deficiency with respect to AIC 15-R05/15-1001 addressed to CASA. The AIC assigned this response a **fully satisfactory** rating, and records the **Status of the AIC Recommendation: Closed, response accepted.**



David Inau, ML

Chief Executive Officer

9 June 2017