

Continuing Airworthiness Notice 05-016



AS 350 Cargo Hook Swing Frame P/N 114-10000 – Eyebolt Retention

1 November 2023

Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains information and guidance about an airworthiness concern that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

AS 350 Cargo Hook Swing Frame P/N OAL 114-10000 manufactured by Oceania Aviation Limited.

Purpose:

The CAA has received a report of an incident where an operator experienced an in-flight failure of a cargo hook swing frame eyebolt attachment.

Refer to Figure 1 below for a photograph of the failed part.

Background:

During an agricultural operation the pilot experienced unusual feedback (i.e., yanking) through the helicopter. Via the aircraft rear view mirror, the pilot noticed that one of the swing frame attachments had failed. The pilot landed the aircraft immediately to investigate.

The front left hook frame attachment eyebolt was found separated from the swing frame and the retaining nut (and split pin) were missing. The swing frame was bent, and the airframe had suffered minor puncture damage.

Prior to the flight the pilot and ground staff had inspected the swing frame and found no abnormalities.

An initial investigation by Oceania Aviation Limited has identified the potential for the eyebolt retaining nut split-pin to fail, allowing the retaining nut to undo.

Recommendation:

Oceania Aviation has released Service Information Letter (SIL) OAL-SIL-005 in response to the possibility for the eyebolt retaining nut split-pin to fail.

Operators of the affected cargo hook swing frame are advised to review and follow the recommendations in the OEM SIL.

If any defects or findings during an inspection of a cargo hook swing frame is found, complete a CA005 Defect Report form and submit the completed form to the CAA at: CA005@caa.govt.nz or report findings via the online reporting system available at:

<https://occurrences.caa.govt.nz/ProdUI/> Please include all findings and any other relevant technical information. A CA005D Defect Report form can be obtained from:

<https://www.aviation.govt.nz/about-us/forms/Filter/?SearchTerm=&Rule=8>



Figure 1 Hook Swing Frame attachment failed in flight



Figure 2 Hook Swing Frame attachment point correctly assembled (OAL-SIL-005)