

Safety Information Bulletin

Airworthiness

SIB No.: 2020-11**Issued: 17 June 2020****Subject: Helicopter Rescue Hoist Cable Failure****Ref. Publications:**

- Civil Aviation Safety Authority of Australia Airworthiness Bulletin [AWB 25-034 Issue 2](#) dated 24 April 2020.
- Australian Transport Safety Bureau Safety Advisory Notice [AO-2020-013-SAN-001](#) dated 23 April 2020.
- Breeze Eastern (B-E) Service Information Letter 14 dated 06 April 2020.
- B-E HS-29700 Series Rescue Hoist System Component Maintenance Manual (CMM) 2561001.
- Airbus Helicopters (AH) Maintenance Servicing Manual (MSM) for hoist cycle definition, and Aircraft Maintenance Manual (AMM) for daily checks.
- AH Safety Information Notice No. 3507-S-25 dated 04 June 2020.

Applicability:

AH AS 350 and AS 355 helicopters equipped with B-E hoist 450 lb BL-29700 series.

Description:

During an in-flight cable conditioning test performed on AS 350 helicopter with a 160 kg dummy load, the cable (Part Number BL 126061) failed with consequent loss of hook and external load. The failed section was located a few centimetres from the ball-end at the hook terminal.

Investigation results determined that an incorrect homing after operation was the probable root cause for this cable failure.

Hoist BL 29700 is eligible for Human External Cargo operations on AS 350 and AS 355 helicopters, and a cable failure would result in the loss of the human/humans being attached to it. Correct maintenance and operation of the hoist system is considered essential for safe hoist operation and the applicable instructions should be accomplished.

In particular, the hoist cable should be frequently inspected for damage and signs of potential defects according to the technical documents, paying attention to the acceptance and rejection criteria.

At this time, the safety concern described in this SIB is not considered to be a design related unsafe condition that would warrant Airworthiness Directive (AD) action under Regulation (EU) [748/2012](#), Part 21.A.3B.

This is information only. Recommendations are not mandatory.



Recommendation(s):

EASA recommends the affected operators to accomplish the following actions in order to ensure correct maintenance and operation of the hoist system:

- Maintenance personnel should use the applicable AH MSM definition of hoist cycle to implement the correct maintenance criteria:

1 Hoist cycle (HC) =

- *In flight, one downward movement + one upward movement, whatever the length of the cable and load involved*
- *On the ground, one downward movement of 5 meters or more and one equivalent upward movement, whatever the load involved*

and

- ensure timely implementation of applicable maintenance.

In addition, maintenance personnel and pilot(s), as applicable, should perform the pre-flight and post-flight inspection(s) as per applicable B-E CMM instructions.

Finally, pilots and on-board hoist operators should ensure a proper hoist stowing at the end of each hoist operation, by fully reeling it in to compress the hook bumper. Failure to follow this procedure could result in damage (due to wear and fatigue through vibration and aerodynamic loading) to the cable.

Contact(s):

For further information contact the EASA Programming and Continued Airworthiness Information Section, Certification Directorate, E-mail: ADs@easa.europa.eu.

For any question concerning the technical content of this SIB, please contact: Airbus Helicopters, Web portal: <https://keycopter.airbushelicopters.com> Technical Requests Management, or E-mail: support.powerplant.ah@airbus.com.

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