

COMMENT RESPONSE DOCUMENT

EASA PAD No. 20-146

[Published on 25 September 2020 and officially closed for comments on 23 October 2020]

Commenter 1: Federal Police of Germany – Bernd Laux – 16/10/2020

Comment # 1

Based on different ASB (“the applicable ASB”) for AS332 and EC225 helicopters, the above mentioned PAD N° 20-146 deals with a modification of the Windows Jettisoning System. This to cope with difficulties, which were experienced in jettisoning a cabin window. At the same time the applicable ASB’s require that windows with rectangular aperture of 17” x 14” or more have to be made openable. This after underwater escape has been successfully demonstrated i. a. w. CAP 562, to get so called additional “Escape Routes (ER)”.

On all AS332 Escape Route windows the release handles are installed, but not the regarding release instructions (“1. Pull handle 2. Push window” sticker). Consequently the windows jettisoning system, which always consists of the means and the instructions, is not complete. The regarding Airbus (written) position is that “the absence of markings of release instructions . . . at the Escape Routes . . . is in order to favour above all, the use of the declared EXITs.”

BPOL position is that a Windows Emergency Jettisoning System is only functional if it consists of the appropriate means and appropriate instructions, regardless if installed on declared Emergency Exits or additional Escape Routes. This in analogical application of FAR /JAR/CS 29.811 (e) (...instructions for opening must be shown...).

Consequently our request is that in the Definitions Section of the AD the term Windows Jettisoning System should be defined. E. g. as “a system consisting of the window itself, its seal, the means for the jettisoning of the window and the regarding opening instruction (sticker).”

EASA response:

We disagree with the suggested amendment of the final AD. According to the requirements of FAR 29.807 or JAR 29.807, the certification basis applicable to AS332 C/C1/L/L1/L2 or EC225 LP helicopters, respectively, emergency exits must meet the dimensions as follows: Type I exits (at least 24 x 48 inches), Type II exits (at least 20 x 44 inches), Type III exits (at least 20 x 36 inches) and Type IV exits (at least 19 x 26 inches). Number and location of the emergency exits defined in the helicopter approved rotorcraft flight manual (RFM) ensure that the helicopter design complies with the applicable airworthiness requirements of FAR 29 Amdt 29-16 or FAR 29 Amdt 29-24 or JAR 29 Change 1, as applicable. These emergency exits,



as defined in the approved RFM, are those which are primarily intended to ensure that the maximum seating capacity, including the crew-members required by the operating rules, can be evacuated from the rotorcraft to the ground within 90 seconds.

The jettisoning capability of windows with rectangular aperture of 17 x 14 inches has been satisfactorily demonstrated in accordance with CAP 562 by persons of a size believed to cover 95% of male persons wearing representative survival clothing and uninflated lifejackets. However, these “escape routes”, having smaller size than Type I, Type II, Type III or Type IV emergency exits, do not qualify to be emergency exits and do not meet the requirements of FAR 29.807 or JAR 29.807. Therefore, these exits can be used only as additional means for evacuation to those exits qualified to be emergency exit. Consequently, these “escape routes” should not be marked as “emergency exits”. This do not prevent the operator of a particular helicopter to apply for a deviation to its competent authority with a request to approve the use of jettisoning of these windows and apply the appropriate marking and operating instructions.

No changes have been made to the Final AD in response to this comment.

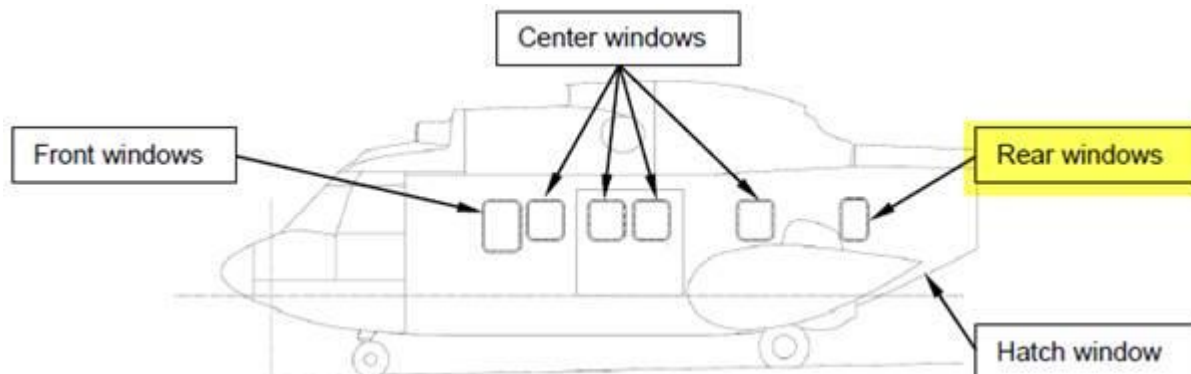
Commenter 2: CHC Helikopter Service – Birger Emil Høie – 23/10/2020

Comment # 2

CHC Helikopter Service, operating 3 AS332L and 4 AS332L1 in the North Sea, will comment on the coming AD related to Airbus ASB AS332-56-00-18 affecting 6 of our AS332L/L1 and Airbus ASB AS332-56-00-21 affecting our AS332L1 S/N 2381.

Based on customer requirement, to have an escape possibility thru the rear cabin window, have our AS332L/L1 fleet been modified with enlarged cabin windows at rear of cabin, both L/H and R/H side.

This modification is based on Bristow Helicopters Ltd. MOD/332/53.4698 that have been approved by CAA-N, see attached approval letter.



The Norwegian Oil and Gas member companies have also developed and implemented recommended guidelines (Norog 066) for flights to the petroleum installations in the North Sea.

These guidelines shall contribute to increase safety for passengers during flight in the North Sea and list requirements we as operator shall meet.

One of these Norog 066 requirements is:

8.5 Evacuation routes

Helicopter emergency exits shall comply with BSL D 5-2/EASA-CS29. In addition, the following requirements apply in connection with evacuation:

- Pop-out function for all windows in the cabin, except for emergency exits.
- The helicopter's escape routes must be marked with fluorescent labels or lights (HEEL/EXIS or equivalent)
- The "Safety on board" leaflet shall be up-to-date at all times and show all relevant escape routes

By implementing the modification described in ASB AS332-56-00-18 and ASB AS332-56-00-20, which is proposed to be mandatory by the coming AD, discussed in PAD 20-146, will affect the Norog 066 § 8.5 requirement in a way that not all cabin windows will have the pop-out function.

In addition to not comply with Norog 066 § 8.5 the aft 3-seat bench could be restricted for use by passengers, resulting in PAX capacity reduction of three passengers on the aircraft.

CHC Helikopter Service request that the coming AD give possibility to keep the pop-out function on the enlarged rear cabin windows on the AS332L/L1, based on the Norog 066 requirement, even that the opening does not fulfil the minimum measurements of 356 mm width and in SPA.HOFO.165(h).

Removal of the pop-out function, on the enlarged rear cabin windows, will not help increasing the safety of passengers during flight in the North Sea.

NOTE: The removal of the pop-out function on the rear cabin window will also affect the existing Helicopter Emergency Egress Lightning (HEEL) system on our AS332L/L1 fleet, approved by the CAA-N.

EASA response:



We disagree with the suggested amendment of the final AD. In case existing modifications or repairs to a helicopter make compliance with AD difficult or impossible, the operator/owner may choose to apply for an alternative method of compliance (AMOC) to comply with the AD (EASA form FO.CAP.00042).

Airbus Helicopter modifications introduced by AS332-56-00-18 and ASB AS332-56-00-21 were not designed for enlarged windows implemented by Bristow Helicopters Ltd. MOD/332/53.4698 and therefore CHC Helikopter Service may want to develop and propose an alternative technical solution, get it approved and, concurrently, or consequently, apply for an AMOC.

In order to approve non-emergency exit windows for further use as “escape routes” we recommend to submit an application to competent authority supervising the helicopter operation.

No changes have been made to the Final AD in response to this comment.

