

Safety Recommendation Number:	IRLD2021015
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Safety Recommendation Status:	In process of implementation

Safety Recommendation:

CHCI should review its OMF procedures in order to: remove consideration of casualty condition from flight crew dispatch/ continuation criteria for SAR missions; require crews of support SAR helicopters to specifically consider when/whether it is appropriate to dispatch under SAR criteria; and provide specific guidance to crews about the assessment of visibility under conditions of darkness and or poor weather.

Response:

On 01 February 2022, and in subsequent engagement with the AAIU, the Operator provided the following response to this Safety Recommendation:

"The operator reviewed its OMF procedures in relation to the recommendations and has taken the following actions:

- Minimum weather limits are now in place for all mission profiles. However, the application of higher limits those in the manual can be applied based on the urgency of each particular mission.

- The aim of the weather limitations is to allow maximum flexibility to aircraft commanders while also providing an appropriate degree of safety.

-An FSI is being drafted to note: At the commander's discretion, higher weather minima may be applied to any particular mission, however application of limits below those specified in the OM's is prohibited. The intent is to focus the decision to launch on whether or not the meteorological conditions are suitable for the particular task, while still allowing missions to be flown safely.

- OMF was reviewed and secondary SAR assets (Helicopter) are operated as SAR operational flights and the operator considers this appropriate in order to conduct mutual SAR support. The operator does not provide Top Cover assets.

- The operator is not aware of any accurate mechanism to assess visibility under conditions of darkness and or poor weather however; the operator will keep this under review as technology becomes available."

On 12 January 2023, the Operator provided the following update to the AAIU:

"CHCI updated the OMF considering the recommendation to remove casualty condition from flight crew dispatch/continuation criteria for SAR missions. The OMF was updated to include the following:

"Commanders are reminded the application of weather minima should be based on the urgency of each particular mission. The aim of the weather limitations as set out below is to allow maximum flexibility to aircraft commanders while also providing an appropriate degree of safety. At the commander's discretion, higher weather minima may be applied to any particular mission.

The intent is to focus the decision to launch on whether or not the meteorological conditions are suitable for the particular task, while still allowing missions to be flown safely, as such the commander shall assess the aviation risk to third parties, the crew, and the aircraft such that it is proportionate to the task."

"CHCI have undertaken attempts to source technology capable of recording in-flight visibility, no such technology is currently available to record in flight visibility, however should such technology become available CHCI will consider its implementation.

CHCI OMF 8.1.3 and A.22 aligns with A.N 0.76. Section 3.2 for the provision of Secondary SAR Asset. This A.N was released in June 2022. The OMF was approved by the IAA on Dec 2021."

On 31 March 2023, the Operator provided the following update to the AAIU:

"CHCI continue to investigate options to source technology and are continuing to engage with other SAR Operators globally."

AAIU Comment:

The AAIU Notes the Operator's response of 01 February 2022.

The AAIU notes that an FSI is being drafted, and awaits an update on this work in due course.

The AAIU also notes that the Operator has discontinued use of its helicopters as Top Cover assets, but that it has decided that all secondary SAR assets (Helicopter) are operated as SAR operational flights.

The Investigation notes the Operator's comment 'The operator is not aware of any accurate mechanism to assess visibility under conditions of darkness and or poor weather'. The Investigation acknowledges the Operator's position. However, this impugns the efficacy of the weather requirements set out in its current OMF section 8.1.3.1.4 which provide different visibility limits for night operations, over land or water, with and without NVIS (Night Vision Image System)—in the absence of a reliable method for determining visibility at night, and in the case of NVIS a reliable method for determining the ambient light levels, it is not possible to operate to the different limits specified. Furthermore, it is the AAIU's opinion that in conditions where the minimum visibility cannot be assured, the Operator should provide specific guidance to crews on how they should proceed.

The AAIU considers the status of this Safety Recommendation to be 'In process of implementation'.

The AAIU Notes the Operator's response of 12 January 2023.

The AAIU notes the Operator's statement (echoing its 1 February 2022 response) 'CHCI have undertaken attempts to source technology capable of recording in-flight visibility, no such technology is currently available to record in flight visibility, however should such technology become available CHCI will consider its implementation.' The AAIU notes, as it has noted previously that 'As a consequence of this acknowledgement, and pending a possible technical solution in the future, it behoves the Operator to provide its crews with instructions on whether, and how, to proceed in conditions (such as poor weather and night) where visibility cannot be assessed.' The matter is made all the more critical when one considers the difficulties involved in estimating visibility, even for a land-based, stationary observer (c.f. WMO Guide to Meteorological Instruments and Methods of Observation, (the CIMO Guide), WMO-No. 8 (2014 edition, Updated in 2017)), Chapter 9, Measurement of visibility. The WMO has found that by day, well-trained, land-based, stationary observers tend to significantly overestimate (15%) visibility vis-a-vis measured visibility; and the situation is more complicated at night due to the increased number of variable factors. When one adds the complication for a SAR commander of making such estimates at night, in poor weather, from a cockpit vantage point that may be moving at high speed, the imperative for this issue to be addressed by the Operator is self-explanatory. Finally, as the AAIU previously explained following the Operator's 1 February 2022 response to IRLD2021012, 'SAR flying can be conducted in areas where no reliable meteorological data is available and therefore crews must rely on their own assessment; and it is that assessment, and the method by which it was made, that the SR [IRLD2021012] seeks to have recorded'. Therefore, the Operator's acknowledgement that there is no technological option to provide reliable in-flight visibility measurement further supports the impetus for this Safety Recommendation.

The AAIU awaits further updates on the Operator's intentions regarding the recording (on the iSAR report) of in-flight visibility, the method of assessing in-flight visibility, and the Operator's instructions to its crews about how to proceed when visibility cannot be assessed.

The AAIU Notes the Operator's response of 31 March 2023.

As the AAIU has noted to the Operator on previous occasions '[...] pending a possible technical solution in the future, it behoves the Operator to provide its crews with instructions on whether, and how, to proceed in conditions (such as poor weather and night) where visibility cannot be assessed.'

The AAIU awaits further updates from the Operator on this ongoing work.

The AAIU considers the status of this Safety Recommendation to be 'In process of implementation'.