



Erick Ferrandez Head of Safety Intelligence & Performance Department Mr Stephan Berndsen, Investigation Manager Dutch Safety Board (DSB) P.O. Box 95404 2509 CK The Hague NETHERLANDS

MCO/SSH/SM1.2 Cologne, Germany

Subject: Safety recommendation related to the event involving the Boeing 737-800, registered PH-HSJ, on 06/09/2019, at Amsterdam Airport Schiphol, Netherlands

Dear Mr Berndsen,

Please find enclosed the European Union Aviation Safety Agency's response with reference to the Safety Recommendation addressed to the Agency following the event mentioned above.

Yours sincerely,

**Erick Ferrandez** 

Copy: Flight Standards – Air Operations & Aerodromes Department Certification Director Flight Standards Director Strategy & Safety Management Director



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Subject: Boeing 737-800 registered PH-HSJ, on 06/09/2019, at Amsterdam Airport Schiphol, Netherlands

Safety Recommendation:	EASA to mandate that EU registered commercial air transport aeroplanes, with a certified maximum certificated take-off mass of more than 27,000 kg, and with a certificate of airworthiness issued after 31 December 2001, to be equipped with a cockpit voice recorder capable of retaining recorded data for at least 25 hours; implement this requirement as of 1 January 2028.
Final response:	The issue of Cockpit Voice Recorder (CVR) data being overwritten after serious incidents and accidents was assessed within the framework of the European Union Aviation Safety Agency (EASA) Rulemaking Task RMT.0400 'Amendment of requirements for flight recorders and underwater locating devices'. The rulemaking impact assessment 'B' contained in the associated Notice of Proposed Amendment (NPA) 2013-26 concluded that the best option with regard to safety, cost impact, regulatory harmonisation, and other aspects, was a combination of several measures, including:- mandatory retrofit of 2-hours recording duration CVR for all aeroplanes that were required to carry a CVR; requiring operators to adopt procedures to ensure the preservation of the CVR recordings upon completion of a flight during which a serious incident or accident occurred; and the introduction of CVRs with a very long recording duration for newly manufactured aeroplanes with a maximum certificated take-off mass (MCTOM) greater than or equal to 27 000 kg.
	In particular, the fitment of CVRs with a very long recording duration (duration of 15 hours proposed in NPA 2013-26; duration of 25-hours finally adopted) was not proposed for already-operated aeroplanes, as such CVR models were not available in 2015, when the corresponding European Union (EU) requirement was published (refer to Commission Regulation (EU) 2015/2338 amending Commission Regulation (EU) No 965/2012). The economic impact of mandating a 2-hours recording duration CVR retrofit by 1 January 2019 was not negligible and implementing this safety recommendation would mean that several hundreds of aeroplanes would have to undergo two CVR retrofits within a few years: the first one to install a 2-hours recording duration CVR, and the second one to replace it with a 25-hours recording duration CVR.

## Reply to Safety Recommendation NETH-2022-001 received on 25/05/2022



 
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that lists the occurrences to be mandatorily reported according to Regulation (EU) No 376/2014. According to the latter Regulation, the pilot in command shall report an occurrence within 72 hours of becoming aware of it, unless exceptional circumstances prevent this (in the investigated incident, the flight crew reported to their operating company after landing at the destination airport); in addition, the operator shall report the details of the occurrence to its competent authority within 72 hours of being notified by a flight crew member. Hence, even in the absence of a CVR recording, it is assumed that soon after a successful rejected take-off, the responsible safety investigation authority (SIA) will be in a position to interview the involved flight crew. In addition, the Flight Data Recorder (FDR) installed on large aeroplanes is required to have a minimum recording duration of 25 hours (refer to Commission Regulation (EU) No 965/2012, Part-CAT, CAT.IDE.A.190), flight data collected for the purpose of a flight data monitoring programme (refer to Commission Regulation (EU) No 965/2012, Part-ORO, ORO.AOC.130) is retained by operators for several months or years, and air traffic management (ATM) recordings must be preserved for at least 30 days (refer to Regulation (EU) No 2017/373, Part-ATS, ATS.OR.455). Hence, while EASA concurs that a CVR recording is beneficial for the investigations of successful rejected take-offs, it is not considered essential. In the case of a rejected takeoff resulting in an accident, it is assumed that in most cases, either the CVR recording will be preserved by the flight crew (as required by Part-CAT, CAT.GEN.MPA.105), or that the loss of power supply to the CVR caused by the accident conditions (such as impact damage or postimpact fire) will de facto stop the CVR recording.

Today, the EU requirement that aeroplanes operated for Commercial Air Transport (CAT) with an MCTOM of more than 27 000 kg and an individual certificate of airworthiness first issued on or after 1 January 2022 shall be equipped with a 25-hours recording duration CVR (refer to Commission Regulation (EU) No 965/2012, Part-CAT, CAT.IDE.A.185) is fully aligned with the International Civil Aviation Organisation (ICAO) Annex 6 part I, standard 6.3.2.3.2. This safety recommendation is therefore proposing more stringent requirements than those prescribed in ICAO Annex 6 Part I. However, third-country (non-EU) operators (TCO) are only required to comply with ICAO Annex 6 part I (including those operating in the EU according to Commission Regulation (EU) No 452/2014). Therefore, although the issue underlying this safety recommendation is equally applicable to TCO, implementing this safety recommendation would not facilitate the investigation of serious incidents and accidents which occurred to such operators where an EU Member State would be State of Occurrence, State of Design or State of Manufacture according to ICAO Annex 13.



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	Given these considerations and since the issue motivating this safety recommendation is not specific to EU Member State operators or to SIAs of EU Member States, EASA would like to recommend that this safety recommendation is redirected to ICAO.
EASA Status:	Closed – Partial Agreement



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