

CVR Erase Function

Background

In view of recent developments, the Federation believes that it is necessary to restate its position that a Cockpit Voice Recorder (CVR) erase function, accessible by the flight crew, should continue to be installed in the flight deck of all commercial transport aircraft. There have been numerous examples of CVR recordings being used for purposes other than accident or serious incident investigation, including publication in the media (e.g. American Airlines flight 965 and GOL flight 1907) and listening to flight crew conversations by airline staff for internal use.

Erase Function

The CVR erase function does not technically delete the recording, but rather scrambles the file's address, preventing easy access, much like a hard drive's quick format. This function, known as "bulk erase" in ICAO documentation, is addressed by ICAO Annex 6 through reference to EUROCAE Document ED-112, to which IFALPA contributed, and which reads as follows:

I-2.1.7 Bulk Erase

After use of a bulk erase function, the recording shall be modified so that it cannot be retrieved using any and all normal replay or copying techniques.

An acceptable means of compliance would be for a bulk erase function to delete that information needed to access the recording medium by the normal replay procedure.

The probability of inadvertent activation of a bulk erase function shall be minimised both in design of the recorder and by ensuring that the bulk erase function, when installed, is wired so that it requires at least two other sets of logic to be satisfied. Wherever practicable, the parking brake should be one of the sets of logic. In addition, the probability of an inadvertent activation of a bulk erase function during an accident shall also be minimised

NOTE 1: In the event of bulk erasure, non-normal replay or copying techniques may be used by the accident investigation authority to retrieve data, if available, for the purposes of conducting an official investigation.

NOTE 2: Normal replay is data retrieval at the equipment level as used in the laboratories of aircraft constructors and modifiers to support certification of recorder installations.

NOTE 3: Non-normal replay is data retrieval from the recording medium media using special techniques available to the recorder manufacturers and/or accident investigation authorities for dealing with severely damaged recorders.

Position

IFALPA endorses the above provisions for installation of a CVR erase function, which should be accessible to the flight crew on the flight deck, and calls for the industry to ensure that these are fully implemented in all commercial transport aircraft. The Federation strongly believes that erasing recordings of conversations after an uneventful flight provides a safeguard against misuse of CVR data, and that the CVR should remain as a tool available exclusively to State Investigation Authorities in the event of an accident or incident.