

**Written Statement of Christopher Julius, NTSB  
Aviation Image Recording Public Hearing  
July 27-28, 2004**

The purpose of this statement is to provide an overview of cockpit voice recorder (“CVR”) and cockpit image recorder (“CIR”) legislation and history, and a description of NTSB policies and procedures regarding CVR/CIR recordings.

## **HISTORY OF THE CVR AND CVR/CIR LEGISLATIVE PROVISIONS**

CVRs were first required in 1964, as a result of Federal Aviation Agency (“FAA”)<sup>1</sup> rulemaking.<sup>2</sup> At the time, the FAA explained:

[CVRs] would be a valuable tool in the investigation of accidents by providing firsthand information of the flight crews’ observation and analysis of conditions aboard the airplane and the procedures employed by them to cope with an emergency. This information would also facilitate the development and establishment of appropriate corrective procedures and standards by the Agency and industry.

29 Fed. Reg. 8401 (1964).<sup>3</sup> In addition to technical matters, the FAA rulemaking addressed “restricted use” of the CVR “record,” announcing that the “only purpose in requiring [CVR recordings] is to assist in determining the cause of accidents or occurrences, and [CVR] information should be used only in connection with the investigation of accidents or occurrences[.]”<sup>4</sup> *Id.* at 8402. The FAA was urged by some to implement a requirement that CVR material not be utilized for any purpose other than accident investigation. However, the FAA stated that it could not bind the courts, and “could not, even if it found it desirable, specify by rule those persons who would be authorized to read out voice recorder tapes.” *Id.* The FAA also permitted a “bulk erase” feature on CVRs, prompted by suggestions received in response to the proposed rulemaking, but explained that “provision of a bulk erase feature should be a matter of individual determination by the air carriers[.]” *Id.*

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<sup>1</sup> The Federal Aviation Agency became the Federal Aviation Administration on April 1, 1967, upon the creation of the Department of Transportation.

<sup>2</sup> See 29 Fed. Reg. 8401 (1964) (“Installation of Cockpit Voice Recorders in Large Airplanes Used by an Air Carrier or a Commercial Operator”); see also 28 Fed. Reg. 13786 (1963) (Federal Aviation Agency’s notice of proposed CVR rulemaking).

<sup>3</sup> Aside from the obvious investigative value, the impetus for the CVR mandate was, simply, the availability of appropriate technology. The Air Transport Association argued in 1964 that efforts and resources would be better spent on flight data and other existing recorders, rather than on CVRs. 29 Fed. Reg. 8401 (1964).

<sup>4</sup> See, e.g., Sections 121.359(h) and 135.151(c) -- 14 CFR Parts 121 and Part 135, respectively -- of the Federal Aviation Regulations (“The Administrator does not use the [CVR] record in any civil penalty or certificate action”).

Since the initial FAA rulemaking in 1964, at least three major pieces of legislation regarding CVRs and CIRs have been enacted.<sup>5</sup>

First, the Independent Safety Board Act Amendments of 1982 enacted NTSB's long-standing policy of releasing only transcripts of the pertinent portions of the CVR recording, and not releasing the actual audio recording.<sup>6</sup> As codified today:

The Board may not disclose publicly any part of a cockpit voice or video recorder recording or transcript of oral communications by and between flight crew members and ground stations related to an accident or incident investigated by the Board. However, the Board shall make public any part of a transcript or any written depiction of visual information the Board decides is relevant to the accident or incident--

(A) if the Board holds a public hearing on the accident or incident, at the time of the hearing; or

(B) if the Board does not hold a public hearing, at the time a majority of the other factual reports on the accident or incident are placed in the public docket.

49 U.S.C. § 1114(c)(1).<sup>7</sup>

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<sup>5</sup> See Exhibit 10B from the NTSB Public Hearing on Aviation Image Recording, July 27-28, 2004, Washington, D.C. (NTSB docket number DCA04SH001), which sets forth the text of the legislation, and relevant portions of the legislative history.

<sup>6</sup> Until the 1982 legislation, NTSB had no statute explicitly prohibiting the disclosure of CVR tapes or limiting the release of CVR transcriptions. This was a concern to NTSB and others in light of the broad public access to information provisions of the 1966 Freedom of Information Act ("FOIA"). See McGilvra v. NTSB, 840 F.Supp. 100 (D. Colo. 1993) (upholding, in a case brought after the 1982 legislative amendment, NTSB's refusal to provide a copy of the CVR recording from the 1991 crash of United Airlines Flight 585 in Colorado Springs, Colorado). In 1968, NTSB promulgated a regulation prohibiting public dissemination of "any cockpit voice recorder tape or transcription thereof, in the custody of the Board, except for a transcription of those communications determined by the Board to be pertinent and relevant to the accident, and which will be placed in the Board's public docket of such accident." See 33 Fed. Reg. 18435 (1968). The NTSB regulation was premised on then-exemption 3 of the FOIA and a statutory provision that provided generic authority to withhold information from public disclosure which adversely affects the interests of a person and is not in the interest of the public. However, in 1976 Congress amended the FOIA, narrowing exemption 3 and effectively depriving NTSB of authority to withhold CVR information sought through the FOIA.

<sup>7</sup> The 1982 legislation also made it clear that the non-disclosure provisions and the timing requirements for release of CVR transcripts "d[o] not prevent the Board from referring at any time to cockpit voice or video recorder information in making safety recommendations." 49 U.S.C. § 1114(c)(2) (2004). It should also be noted that the 1982 legislation provided that the NTSB must release the CVR transcript no later than 60 days after an accident (or, if the CVR was not immediately recovered, no later than 60 days after the CVR was recovered), but the 60-day requirement was subsequently eliminated to "ensur[e] that when [CVR] information is released, it is done so in the context of the rest of the accident investigation." Senate Report No. 101-450 (August 30, 1990). (Note that the CIR provisions were added in 2000).

Second, the Independent Safety Board Act Amendments of 1990 established detailed requirements and procedures for discovery of CVR recordings and non-public CVR information from the CVR owner in judicial proceedings.<sup>8</sup> The impetus for the 1990 legislation was, in large part, a Texas state court order that required Delta Air Lines to release an accident CVR recording in Delta's possession -- NTSB had completed its investigation and returned the original CVR recording to Delta -- to a local television station. The Delta CVR recording was broadcast on local and national television.<sup>9</sup> The "discovery" provisions, which were sought by the Air Line Pilots Association, require that discovery of CVR material in judicial proceedings only be permitted if a judge determines it necessary for a party to receive a fair trial. Thus, for example:

Except as provided in paragraph (4)(A) of this subsection, a court may allow discovery by a party of a cockpit or surface vehicle recorder recording if, after an in camera review of the recording, the court decides that-- (A) the parts of the transcript made available to the public under section 1114(c) or 1114(d) of this title and to the party through discovery under paragraph (2) of this subsection do not provide the party with sufficient information for the party to receive a fair trial; and (B) discovery of the cockpit or surface vehicle recorder recording is necessary to provide the party with sufficient information for the party to receive a fair trial.

49 U.S.C. § 1154(a)(3) (2004). If discovery is permitted, strict procedures govern the scope of access to and use of CVR material. Thus:

When a court allows discovery in a judicial proceeding of a part of a cockpit or surface vehicle recorder transcript not made available to the public under section 1114(c) or 1114(d) of this title or a cockpit or surface vehicle recorder recording, the court shall issue a protective order-- (i) to limit the use of the part of the transcript or the recording to the judicial proceeding; and (ii) to prohibit dissemination of the part of the transcript or the recording to any person that does not need access to the part of the transcript or the recording for the proceeding[; and]

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<sup>8</sup> The statutory provisions governing release of CVR material by NTSB is an absolute bar to discovery from NTSB. See 49 U.S.C. § 1114(c) (2004). However, in rare cases where an NTSB investigation is still in progress when litigation matures to the point where discovery is necessary, NTSB can provide the owner of the CVR a copy of the CVR recording for purposes of discovery if NTSB has not yet released the original CVR recording to the owner.

<sup>9</sup> See Exhibit 10H from the NTSB Public Hearing on Aviation Image Recording, July 27-28, 2004, Washington, D.C. (NTSB docket number DCA04SH001) ("Statement of Captain Henry Duffy, President, Air Line Pilots Association, Before the Aviation Subcommittee, Committee on Commerce, Science and Transportation, United States Senate, May 10, 1990, Cockpit Voice Recorder Protective Legislation").

A court may allow a part of a cockpit or surface vehicle recorder transcript not made available to the public under section 1114(c) or 1114(d) of this title or a cockpit or surface vehicle recorder recording to be admitted into evidence in a judicial proceeding, only if the court places the part of the transcript or the recording under seal to prevent the use of the part of the transcript or the recording for purposes other than for the proceeding.

49 U.S.C. § 1154(a)(4) (2004).<sup>10</sup>

Finally, in 2000 Congress expanded the above-mentioned provisions to encompass CIRs. In testimony before Congress, NTSB explained:

In the last decade, considerable progress has been made in video and flight recorder technologies, and the need for recording of cockpit images has become more evident. Electronic image recording of the cockpit environment is now both technologically and economically feasible.... There has been some reluctance on the part of industry and labor to endorse the use of these devices, as there was when CVRs were first introduced. As a result, the Safety Board has asked Congress to provide us with the authority to withhold these devices from public disclosure. We believe it is appropriate and timely to ensure that there are no legislatively-defined differences between the treatment of new video technology and existing voice recorders.<sup>11</sup>

## **NTSB POLICIES AND PROCEDURES**

NTSB has never authorized the release of a CVR recording, nor has NTSB ever authorized anyone else to release a CVR recording.<sup>12</sup> Obviously, the content is very sensitive, and NTSB treats the evidence recorded by CVRs and CIRs with the utmost respect.

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<sup>10</sup> The full text of section 1154(a) is set forth in its entirety in Exhibit 10A from the NTSB Public Hearing on Aviation Image Recording, July 27-28, 2004, Washington, D.C. (NTSB docket number DCA04SH001) (Note that the CIR provisions were added in 2000).

<sup>11</sup> Testimony of Jim Hall, Chairman, National Transportation Safety Board before the Committee on Appropriations, Subcommittee on Transportation and Related Agencies House of Representatives Regarding Aviation Safety, March 22, 2000.

<sup>12</sup> Indeed, the NTSB reacted with dismay when a CVR recording from the crash of American Airlines Flight 965, which crashed near Cali, Colombia, on December 20, 1995, was released by unknown persons outside of NTSB and aired, in part, on a January 18, 2000 Dateline NBC broadcast. In a press release issued after the Dateline broadcast, Chairman Jim Hall said:

As everyone associated with the business of air safety knows, cockpit voice recorders are an invaluable tool in determining the causes of aircraft accidents and, therefore, invaluable in promoting air safety worldwide. In an effort to

NTSB currently has procedures and policies in place to ensure that the actual CVR recordings are never heard, except by a very small number of qualified participants in the official NTSB accident or incident investigation.<sup>13</sup> For example, even among NTSB investigators and officials actively involved in the investigation, access to the recording or draft transcripts is strictly controlled. Indeed, only four persons at NTSB are automatically authorized to hear a CVR recording, or review draft transcripts: (1) the recorder specialist assigned to the accident, (2) the investigator-in-charge (IIC), (3) the Director of the Office of Aviation Safety, and (4) the Director of the Office of Research and Engineering. In accordance with NTSB procedures, all other NTSB personnel must consult with the IIC and obtain the permission of both the Director of the Office of Aviation Safety and the Director of the Office of Research and Engineering prior to reviewing a recording or non-public transcript. All authorized NTSB personnel who listen to a CVR recording must record each review or audition in the CVR Audition Log.<sup>14</sup>

Similarly, for participants in a CVR group convened by NTSB to transcribe a CVR recording, each participant must be approved by the Director of the Office of Aviation Safety and the Director of the Office of Research and Engineering before they are permitted to hear a CVR recording.<sup>15</sup> Party representatives participating on the CVR group must also sign the *CVR Non-Disclosure Agreement*, and they are prohibited from discussing the recording while outside the laboratory. Finally, participants are prohibited from bringing electronic devices into the

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keep those recordings from being used for any purposes other than the advancement of air safety, Congress has placed strictures on the use of CVRs, and prohibited the government from ever releasing the audio portions of the recordings.

I was therefore dismayed to hear the recorded voices of the pilots of American Airlines flight 965, which crashed near Cali, Colombia on December 20, 1995, broadcast on network television last night. The use of such a recording--however it was obtained--for such a purpose is inappropriate. It does nothing to advance the cause of aviation safety, and only serves to sensationalize a tragedy. It is imperative that the privacy of these recordings be preserved as dictated by law.

NTSB Advisory, January 19, 2000, "Statement by NTSB Chairman Jim Hall on Broadcasting of Cockpit Voice Recorder Tape." The accident investigation was conducted by and under the control of the Colombian authorities, with technical assistance from NTSB and others.

<sup>13</sup> NTSB would follow similar procedures for CIRs.

<sup>14</sup> See Exhibit 10F from the NTSB Public Hearing on Aviation Image Recording, July 27-28, 2004, Washington, D.C. (NTSB docket number DCA04SH001) ("Cockpit Voice Recorder Handbook for Aviation Accident Investigations, NTSB Office of Research and Engineering, Vehicle Recorder Division").

<sup>15</sup> A CVR group consisting of technically qualified members from, usually, the NTSB, FAA, operator of the aircraft, manufacturer of the airplane, manufacturer of the engines, and the pilots union, is routinely formed during an NTSB investigation to listen to the CVR recording and create a written transcript of the tape to be used during the investigation.

CVR laboratory, and any notes taken during the meeting are collected and destroyed before the group is dismissed.<sup>16</sup>

## ICAO ANNEX 13

Notwithstanding the stringent limitations in the United States regarding access to CVR recordings, they differ from the international standards published by the International Civil Aviation Organization (“ICAO”) in Annex 13 to the Convention on International Civil Aviation, Aircraft Accident and Incident Investigation (“Annex 13”). According to Annex 13, the state conducting an investigation (which, generally, is the state of occurrence) “shall not make [CVR recordings or transcripts] available for purposes other than accident or incident investigation, unless the appropriate authority determines that their disclosure outweighs the adverse domestic and international impact such action may have on [the current] or any future investigations.”<sup>17</sup> Annex 13 also states that CVR recordings or transcripts “shall be included in the final report or its appendices only when pertinent to the analysis of the accident or incident. Parts of the records not relevant to the analysis shall not be disclosed.”<sup>18</sup>

NTSB has filed formal “differences” to Annex 13 as a result of conflicting US laws. The purpose is to place the signatories to Annex 13 on notice of (1) specific legislation in the United States that permits courts to order disclosure, under specific circumstances, of CVR information and recordings, (2) legislation that limits disclosure of CVR-related information by NTSB to transcribed portions of the recording deemed pertinent and relevant to the NTSB investigation, and (3) that there is no provision in US law (which has a bias for public availability of information, as reflected in the FOIA) for considering the adverse domestic or international effects on investigations that might result from access to CVR recordings or information.<sup>19</sup>

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<sup>16</sup> See footnote 14.

<sup>17</sup> See Annex 13, Section 5.12 (9<sup>th</sup> Edition).

<sup>18</sup> See Annex 13, Section 5.12.1 (9<sup>th</sup> Edition).

<sup>19</sup> Exhibit 10I from the NTSB Public Hearing on Aviation Image Recording, July 27-28, 2004, Washington, D.C. (NTSB docket number DCA04SH001) contains the relevant portions of Annex 13, including the formal “differences” filed by the United States.