"PRIVILEGED COMMUNICATIONS?" THE BRIGHT LINE RULE IN THE USE OF COCKPIT VOICE RECORDER TAPES

Van Stewart*

I. INTRODUCTION

The autumn of 2001 in the Northeastern United States was unprecedented in terms of aviation disasters. First came the mind-numbing events of September 11, which kept the world glued to its television sets for weeks. The story of the four commercial aircraft that were hijacked and ultimately flown into the World Trade Center in New York City, the Pentagon in Arlington, Virginia, and an open field near Shanksville, Pennsylvania, shocked and mesmerized viewers everywhere.

The two Boeing 767 aircraft, American Airlines (“American”) Flight 11 and United Airlines (“United”) Flight 175, that were intentionally flown by hijackers into the World Trade Center began conflagrations so intense that the Cockpit Voice Recorders (“CVRs”) and Flight Data Recorders (“FDRs”), which are designed to withstand severe impacts and extreme temperatures, were never recovered. The devices were presum-ably consumed in the flames and the subsequent collapse of the Twin Towers. The recorders from the wreck of American Flight 77, the Boeing 757 that crashed into the Pentagon, and United Flight 98, also a 757, that crashed in Pennsylvania, survived to provide investigators with some clues regarding the events on board the aircraft. Of the two CVRs recovered, only Flight 93’s was functional after impact.

Next, on November 12, American Flight 587 crashed shortly after takeoff from New York’s John F. Kennedy Airport (“JFK”), killing 265 persons. The preliminary evidence showed that the aircraft’s vertical stabilizer snapped off during or shortly after an encounter with wake turbulence from a Japan Airlines Boeing 747 aircraft that had
taken off shortly before the American A300. While the first four crashes clearly were not accidents, the crash at JFK apparently was. Common among these seemingly unrelated crashes is that the recovered CVRs and FDRs play an important part in the investigations that follow air disasters.

A civil aircraft accident within the United States is normally investigated by the National Transportation Safety Board ("NTSB" or "the Board"). When found, the recorders are taken to the NTSB laboratory in Washington, D.C. for retrieval and analysis of any information they may contain. If it is determined that an airplane crash is the result of a criminal act rather than an accident, as is the case with the four crashes of September 11, the Federal Bureau of Investigation ("FBI") becomes the lead investigative body, with the NTSB providing technical support. While major accident investigations may take years to determine a cause, useful information can bring about important recommendations early in the investigative process. For example, after the crash of American Flight 587 in New York, enough information was obtained from the investigation that on February 8, 2002, less than three months after the accident, the NTSB issued a Safety Recommendation on pilot training issues. The Safety Recommendation noted that certain manipulations of rudder controls may "produce loads higher than those required for certification and that may exceed the structural capabilities of the aircraft." In the aftermath of any commercial aircraft crash, requests are typically made for detailed information from the recorders. These requests come from a wide variety of interested parties including the media, media watchdogs, sensation seekers, family members of crash victims, and plaintiffs' and defendants' attorneys. But the law, as reflected by federal regulations and court decisions, dictates that access to the actual audio output of the recorder, i.e., the recordings as opposed to their transcripts, will be very limited and will only be given to those directly involved in the crash investigations. Access to the actual recordings is limited because, as the original legislation mandating CVRs states, the information is intended solely for accident investigation purposes.

Corkscrew effect of its propeller. It is known, however, that this disturbance is caused by a pair of counter rotating vortices trailing from the wing tips. The vortices from large aircraft pose problems to encountering aircraft. For instance, the wake of these aircraft can impose rolling moments exceeding the roll control capability of some aircraft. Further, turbulence generated within the vortices, if encountered at close range, can damage aircraft components and equipment and cause personal injuries. 


Press Release, NTSB, Providing Technical Assistance to FBI Investigation (Sept. 13, 2001), available at http://www.ntsb.gov/Pressrel/2001/010913.htm TSB.gov/Pressrel/2001/010913.htm [hereinafter NTSB Providing Technical Assistance to FBI Investigation] stating that because the crashes of the four airliners on September 11, 2001 were "criminal acts," the Federal Bureau of Investigation ("FBI") was named the "lead investigative agency" and was placed in charge of "[releasing all information on the progress of the investigation]."

See Press Release Flight 587, supra note 6 (stating that after the Flight 587 crash, NTSB Chairman Marion C. Blakey and FBI Director Robert Mueller remained in contact because the FBI was an "active participant in the investigation"). At the time of the press release, the NTSB had found nothing to indicate that the crash of Flight 587 was "anything other than an aviation accident." Id.

See Blakey Opening Statement, supra note 3 (explaining that the "goal of . . . every [aircraft accident] investigation—is to determine the cause of the accident and prevent its reoccurrence").

See NTSB, About the NTSB: History and Mission, at http://www.ntsb.gov/AbtNTSB/history.htm (last visited Apr. 17, 2002). The NTSB is an independent federal agency responsible for investigating all civil aviation accidents and major rail, highway, marine and pipeline accidents in the United States. Id.

See 49 U.S.C. §1131(a)(2)(B) (2000). The statute states that "[i]f the Attorney General, in consultation with the Chairman of the Board [of NTSB] determines and notifies the Board that circumstances reasonably indicate that the accident may have been caused by an intentional criminal act, the Board shall relinquish investigative priority to the Federal Bureau of Investigation." Id. See also NTSB, About the NTSB: The Investigative Process, at http://www.ntsb.gov/AbtNTSB/invest.htm (last visited Apr. 17, 2002) (detailing the circumstances under which the NTSB handles an investigation of an aviation accident).

See Safety Recommendation Letter from Marion C. Blakey, Chairman of the NTSB, to Jane F. Garvey, Administrator of the Federal Aviation Administration (Feb. 8, 2002), available at http://www.ntsb.gov/Recs/letters/2002/A02_01_02.pdf (last visited Apr. 17, 2002) (detailing NTSB safety recommendations A-02-01 and A-02-02, which seek to rectify inadequate pilot training concerning the "structural certification requirements for the rudder and vertical stabilizer on transport-category airplanes").

See, e.g., Jonathan D. Silver, Flight 93 Black Box Under Wraps, PITTSBURGH POST-GAZETTE, Nov. 4, 2001, at A9 (discussing the public’s difficulties in gaining access to the United Flight 93 FDR).

Id.
Beginning with the introduction of CVRs, there has been an ongoing tension involving the government, air carriers, airline pilots, the press, and the legal community regarding access to, and the appropriate use of the audio tapes and transcripts from the recorders. This Comment will outline the history of the introduction of CVRs in the U.S. civil air fleet as an aid to accident investigation, including the acquiescence of airline pilots to the invasion of their privacy in the interest of aviation safety. Next, this Comment will describe the four principal potential uses and abuses of the products of the recorders (recordings and their transcripts) and trace some of the history of each. This Comment then will explore the principal positions of the various constituencies, especially in the context of applicable legislation and litigation. The Comment next addresses the current state of equilibrium. While not living up to the intentions of the various constituencies, especially in the context of applicable legislation and litigation, the Comment will point out that the information available in publicly released transcripts should be adequate for the needs of those outside the accident investigation arena, obviating the need to subpoena recordings for what amounts to fishing expeditions. The Comment will then discuss current issues and initiatives affecting the future of aircraft flight recorders, particularly an active proposal to mandate cockpit video recorders in commercial aircraft. Finally, this Comment will forecast that the advent of cockpit video recorders will disturb the delicate legal equilibrium that exists today, necessitating continued vigilance by Congress and the courts.

II. PROVIDING THE MISSING PIECES FOR ACCIDENT INVESTIGATORS – A BRIEF HISTORY

The earliest airplanes did not have an electrical system, let alone a radio or recorders. If the airplane had more than one seat, communications between the occupants occurred through either hand signals or a “gosport,” a rubber tube through which an instructor pilot could talk to his or her student. After electric generators were developed for aircraft, radios and a never-ending collection of technological gadgets followed, which now include satellite-based navigation, satellite-based communications and digital data links used for air-to-ground communications, and the FDRs and CVRs that are the mainstay of modern aircraft accident investigation followed.

Aircraft accident investigation has evolved from cursory and ineffectual efforts to find the cause of an accident to a very painstaking and technical process involving investigators from a wide variety of disciplines using sophisticated techniques and technologies.

29 Fed. Reg. 8401 (July 3, 1964) [hereinafter Installation of Cockpit Voice Recorders] (stating that the FAA’s “only purpose in requiring the recorded information is to assist in determining the cause of accidents or occurrences” and that the information is only to used in “connection with the investigation of accidents or occurrences”).

16 See Jack Cook, Part I, Training Days, at http://www.ajcockrell.com/history/jcook01.htm (last visited Oct. 22, 2002). The instructor had a rubber tube known as a “gosport” that he could use to talk to the student. One end was attached to the ear flap on the student’s leather helmet, and the other end was a small funnel into which the instructor yelled. The student could not talk to the instructor; he could only shake his head “yes” or “no.” Communications between instructor and student could have been lost because of the noise from the engine and the rush of the wind through the cockpit. Id.


19 See, e.g., ARINC Products & Services, GlobalLink Services, at http://www.arinc.com/products/globalink/index.html (last visited Apr. 17, 2002). The data link services used by airlines are used primarily to communicate with dispatchers and maintenance centers on operational and maintenance matters, as well as with automated services that provide weather and airport-related information. These data links provide high speed, high capacity communications without congesting traditional voice frequencies. Id.


21 One need only compare an accident investigation report from an earlier time with a contemporary report to see the level of sophistication of modern technology and tech-
nings in the 1920s through the late 1950s, the only way to ensure an onboard eyewitness account of an aircraft accident was pilot survival. Without a reliable observer, most accident reconstruction was left to educated guesses and speculation.  

For instance, after World War II, there was a string of speculative efforts to pin down the cause of a series of accidents involving cargo compartment fires in DC-6 aircraft. Consensus had been building that these and other similar accidents in this time frame all were due to pilot error. Accident investigators did not have enough information to piece together what the root causes might be. In October 1947, a United DC-6 became the next victim of in-flight fire resulting in a crash near Bryce Canyon, Utah. Before they died in the crash, the pilots were able to communicate, via their radio, enough detailed information about what was happening aboard the aircraft for investigators to begin to piece together what was bringing down so many of the new generation of pressurized aircraft. The next month, an American DC-6 had a similar fire, but landed safely.  

Based on the information provided by the doomed United crew and the information derived from the wreckage in the United and American incidents, accident investigators determined that the problem was a design flaw in the fuel system. Under certain circumstances, when fuel was transferred between two particular fuel tanks, fuel would enter the intake of the cabin heater, causing it to catch fire. The investigators discovered these deficiencies and also found that there were no published crew procedures for fuel transfer that could have prevented the fires. As a result, the Civil Aeronautics Administration ground all DC-6s and brought about needed changes. The radioed reports from the United crew and the survival of the American crew were serendipitous. Several aircraft, however, were lost before the problem was found.  

Many of those aircraft might not have been put in harm's way had there been a CVR or a 21st century FDR to record what really happened to the downed aircraft, enabling a more timely identification of the cause and, most importantly, a viable fix. However, more than a decade passed before FDRs were mandated in commercial aircraft, and it was two decades before voice recorders were introduced to provide the often crucial pieces to the aircraft accident puzzle.  

In response to the growing number of unsolved aircraft accidents and the need for more information to aid in accident investigations, the U.S. government first mandated FDRs in the late 1950s and by 1964, CVRs were required in "large airplanes used by air carriers or commercial operators." The FAA’s sole intent was to provide information to aid aviation accident investigators in determining the “cause and nature of the emerging aviation accidents and the need for more information to aid in accident investigations, the U.S. government first mandated FDRs in the late 1950s and by 1964, CVRs were required in "large airplanes used by air carriers or commercial operators." The FAA’s sole intent was to provide information to aid aviation accident investigators in determining the “cause and nature of the emerging aviation accidents and the need for more information to aid in accident investigations, the U.S. government first mandated FDRs in the late 1950s and by 1964, CVRs were required in "large airplanes used by air carriers or commercial operators."
gency.” This intent was made even clearer just prior to implementation:

The [FAA] agrees that its only purpose in requiring the recorded information is to assist in determining the cause of accidents or occurrences, and that the information should be used only in connection with the investigation of accidents or occurrences . . . and not in a civil penalty or certificate action. Cockpit voice recorders, often referred to as “black boxes,” come in several versions, depending largely on their date of manufacture and the FAA specifications at the time. Traditional CVRs typically record continuously on a loop of magnetic tape beginning at the CVR’s activation prior to the checklist the pilot is required to go through before engine start. It records information via an overhead microphone (“cockpit area microphone”), which captures voice conversation as well as the ambient noises associated with the movement of levers and switches, engines and other airplane components. It also collects information directly from the pilots’ headsets so that radio transmissions are included, and it collects information from oxygen mask microphones so that communications will not be lost while pilots are using the masks. The tape typically can hold 30 minutes of sound recording and, therefore, retains only the last 30 minutes or so prior to the recorder being shut down—either by being turned off or because power was lost for another reason, such as a crash. The newest models incorporate digital technology, recording on memory chips instead of tape, and can hold two hours of sound in digital format.

Cockpit voice recorders are built to withstand incredible extremes of impact shock, temperature and pressure. The typical modern CVR must be able to sustain an impact force of 3400 G. They must also be able to withstand a fire of 1100 degrees Celsius (2012 degrees Fahrenheit) for at least 30 minutes and remain undamaged to a depth of 20,000 feet underwater. The specifications also call for an underwater locator beacon capable of operating continuously for 30 days.

III. THE TENSION - POTENTIAL USES FOR CVR RECORDINGS

Along with the introduction of CVRs on U.S. airliners, there also came four potential uses for their output: (1) accident investigation; (2) public airing by the media; (3) litigation; and (4) criminal investigation and prosecution. The first was an intended use; the others were not.

A. Accident Investigation

The value of CVRs became apparent from the beginning of their use. On December 20, 1967, shortly after the mandate for CVR installation in the domestic air fleet, a Delta Airlines (“Delta”) DC-8 on a pilot training flight crashed during a practice emergency approach that simulated two
inoperative engines. Based primarily on the cockpit conversations extracted from the newly installed CVRs, accident investigators were able to conclude that two of the principal reasons for the accident were "errors in judgment by the captain-trainee and inadequate supervision and exercise of command on the part of the instructor." This is an example of the most basic type of analysis expected to come from CVRs—being able to analyze both the words spoken by cockpit occupants and the context in which they are spoken. In this case, the trainee was a very experienced captain being trained to qualify to operate a new aircraft by another very experienced captain. It was evident from the CVR recording that the training environment was relaxed, probably because the trainee and the instructor were essentially equal. This led the investigators to conclude that the informal instructor-student relationship resulted in a less attentive atmosphere than that which might have prevailed had the trainee been less experienced.

The tones of the few suggestions given by the instructor were in a mild prompting manner. There appeared to be complete confidence in the student’s ability to overcome any problem, including the drastically reduced airspeed. There was no apprehension manifest until the captain-trainee himself recognized the loss of control, at which point the accident was inevitable.

Exactly a month before the Delta training accident, on November 20, 1967, a Trans World Airlines ("TWA") Convair 880 four-engine passenger jet crashed during its approach to the Greater Cincinnati Airport, located in Covington, Kentucky. The investigation of this accident vividly demonstrated that CVRs could produce more than cockpit conversations. "In an effort to determine engine power used during the latter stages of the flight . . . the original CVR tape was provided to the engine manufacturer for an analysis of engine-generated sound spectral frequency relationships. Several prominent resonances were detected on the accident CVR tape." Sophisticated analysis contributed to a better understanding of thrust requirements and thrust management during the approach, demonstrating the wealth of additional information which may be available on a CVR tape.

NTSB investigators used a similar analysis of the CVR tapes to help determine the likely cause of the crash of Air Florida Flight 90 on January 13, 1982. The aircraft crashed into the 14th Street Bridge across an ice-covered Potomac River immediately after takeoff from Washington’s National Airport. Sound spectrum analysis of the CVR tape allowed analysts to determine that the engines were not developing the thrust required for takeoff. This information prompted further tests at Boeing, the aircraft’s manufacturer, that demonstrated that the suspected icing of an engine sensor, called an engine inlet probe, resulted in an undetected reduced thrust in the range that the spectrum analysis had indicated. Combined with the conversations recorded on the CVR, this critical information allowed investigators to draw conclusions based on hard facts rather than mere speculation.

Cockpit voice recorder tapes have also revealed inadequacies in training and procedures. In 1974, a TWA 727 crashed into a ridge near Round Hill, Virginia in part because of a misinterpretation by the pilots of air traffic control terminology. As a result, the FAA changed its relevant air traffic con-
2. Back Toward Original Intent.

The legislation, an amendment to a five-year extension of the Aviation Insurance Program\(^6\) ("war risk insurance program"), requires the NTSB to withhold CVR recordings and transcripts associated with ongoing accident investigations. The NTSB is then required to make relevant portions of the transcripts available to the public at the Board's public hearing, but no later than 60 days after the accident or after CVR recovery, whichever is later.\(^6\) The clear intent was to give the NTSB an undisturbed 60-day window to assess the contents of the CVR tapes before the "relevant and pertinent" portions of the transcript are released to the public.\(^6\)

This legislation did not quell premature leaks of transcripts or copies of the tapes themselves. In 1987, even before the NTSB’s CVR group had its first meeting,\(^6\) the New York Times published excerpts of CVR data from a Northwest Airlines accident in Detroit.\(^6\) In addition, at least one state court made a CVR tape available through discovery without placing a protective order on its use.\(^6\) As a result, the tape, intended solely for use in accident investigations, found its way outside this realm. In one of the more egregious misuses of a CVR tape, a Texas state court ordered the release of a tape through discovery. The tape ended up in the hands of the local news media and was ultimately picked-up and aired by the national affiliates.\(^6\)

In the midst of this tug-of-war are the pilots. Their conversations are recorded on the CVR

---

50 Id.
56 See H.R. Conf. Rep. 97-864, at 3 (1982), reprinted in 1982 U.S.C.C.A.N. 3042, 3043. This provision states: [T]he [NTSB] shall withhold from public disclosure cockpit voice recorder recordings and transcripts involving flight crew communications that are associated with accidents investigated by the Board. The Board is required to make available to the public those portions of the transcripts of such communications that the Board deems relevant and pertinent to the accident, at the time of the Board’s public hearing on the accident, and in any event no later than 60 days following the accident. In the event that the CVR is not recovered immediately after the accident, the conferences intend that the Board have 60 days after recovery of the CVR before release. The conferences emphasize that this amendment would not affect the Board’s current practice of sharing CVR information with parties to the investigation. Id.
57 Id.
58 See Johnson, supra note 63, at 4.
60 Id. at 5.
tapes. While initially reluctant to become the subjects of eavesdropping, pilots recognized the benefits reaped in accident investigations and were eventually won over with assurances that the CVR tapes would be used solely for this purpose. As early as 1969, the Executive Board of the Air Line Pilots Association ("ALPA"), which represents the majority of airline pilots in the United States, endorsed the use of CVRs, with the proviso that their use be limited to accident investigators. At the same time, ALPA continued to reaffirm "its longstanding position in opposition to the use of aircraft crash recorders and cockpit voice recorders for purposes other than accident investigation."

In addition to Congress, the FAA, NTSB and a majority of U.S. pilots, many in the international aviation arena share this view. The International Civil Aviation Organization ("ICAO") is a specialized agency of the United Nations, formed "to secure international co-operation . . . [in the] highest possible degree of uniformity in regulations and standards, procedures and organization regarding civil aviation matters." The ICAO's policy is that records, including specifically "cockpit voice recordings and transcripts from such recordings," are not available "for purposes other than accident or incident investigation, unless the appropriate authority for the administration of justice in that State determines that their disclosure outweighs the adverse domestic and international impact such action may have on that or any future investigations." The United States has filed "differences" to the ICAO policy to reflect current U.S. law.

In New Zealand, in response to a successful police warrant to seize the CVR from a 1995 aircraft accident, the government enacted new law reflecting the ICAO policy by protecting products of flight recorders and the privity of accident investigations. The law limits use of recorders to accident investigations, prohibits their use in legal or administrative proceedings and prevents their use by the media. The legislation was forward-looking because it included emerging technologies such as cockpit video recorders. Current U.S. law proscribes a similar release of video recordings, even though video recorders are not yet required in cockpits. The International Federation of Air Line Pilot Associations ("IFALPA") also endorses the use of CVRs under conditions very much like those permitted in the U.S.

Why should the pilot's opinion matter? Why should society need a pilot's "permission" to record their professional activities? The answer is that CVRs, while serving a vital function when used as intended, can also constitute an otherwise unwarranted intrusion on an individual's expectation of privacy in the workplace. The Supreme Court has held that even a public employee has "a reasonable expectation of privacy in his office,"

---

73 Id.
74 Id. at 80-72.
77 See Annex 13 to the Convention on International Aviation, Aircraft Accident and Incident Investigation §5.12 (International Civil Aviation Organization, 9th ed. 2001).
78 The most recent differences were submitted by the U.S. to reflect U.S. differences with the Ninth Edition of Annex 13 to the Convention on International Aviation, which became effective November 1, 2001. See Memorandum to the Secretary General of the International Civil Aviation Organization (Nov. 1, 2001) (on file with this author) (de-lineating the differences between the Ninth Edition of Annex 13 to the Convention on International Aviation and specific U.S. regulations and practices).
79 See Capt. Paul McCarthy, Kinos, C.L.O.P, and the CVR, Air Line Pilot, Jan. 2000, at 22. On June 6, 1995, an Ansett DHC-8 twin turboprop aircraft enroute to Palmerton North on New Zealand's North Island crashed into a ridgeline during an instrument approach while the pilots were troubleshooting a malfunctioning landing gear. Four passengers and the flight attendant were killed. At the same time the New Zealand Government Transport Accident Investigation Commission was investigating the accident, the police sought and obtained the CVR tape as part of an investigation to determine if the pilots were criminally liable in the operation of the aircraft. At the time, CVRs were not even required in New Zealand. Id.
80 Id.
81 Id.
83 See 49 U.S.C. §1114(c)(1) (2000) (stating that 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").
84 See id.
85 See International Federation of Air Line Pilots, Policy Manual, §5.7.3.
and, to a professional pilot, the cockpit is their office. Pilots have acquiesced to having that privacy invaded by a CVR, but only for the purpose of accident investigation.

When the subject of CVRs comes up in discussions among pilots, a comparison inevitably arises with the medical community, which, for example, has no mandatory recorders in the operating room. Within the period 1982-2000, the year 1996 posted the highest number of deaths caused by aircraft accidents in scheduled U.S. air carrier service. There were three fatal accidents, causing the deaths of 342 persons.

None of the accidents were attributed to pilot error. In contrast, a study published in 2000 by the National Academy of Sciences ("NAS") estimated that between 44,000 and 98,000 people die annually in the United States from medical errors that occur in hospitals. The study also acknowledged that the aviation industry must be doing something right because by the early 1990s, "the U.S. airline fatality rate was less than one-third the rate experienced in mid century. In 1998, there were no deaths in the United States in commercial aviation." Faced with these statistics, pilots wonder why they have had to give up their privacy while members of the medical community have not.

In the same way that flight recorders monitor vital data that can help accident investigators identify the cause of aircraft crashes, the operating theatre "black box" would record who was present and what they were doing, monitor patients' vital signs, equipment being used, record conversations, and track personnel and even individual hand movements.

But, notwithstanding the benefits of CVRs, the medical community is aware of the problems that have followed CVRs into the cockpit; the results would be the same if CDRs were used to monitor physicians' activities. An article for the Health Law and Policy Institute at the University of Houston Law Center sums up the problems that would accompany introduction of CDRs to medical facilities.

One potential problem with the widespread use of CDRs is that the information collected could be used for purposes other than improving medical quality and assuring patient safety. The information collected could be used to promote medical malpractice suits. Patients who are not satisfied with a surgical outcome could potentially build a lawsuit around the information contained in CDRs.

As a result, health care workers would be unlikely to embrace CDRs monitoring them, despite benefits to patients. The medical community would fear misuse of the tapes and unauthorized invasions of their privacy.

In a recent article touting the dramatic potential benefits of re-creations and animations in the courtroom, Richard Schaden dramatizes the impact of tools like CVRs and CDRs.

On final approach, a 757 rolls out of control and dives into the ground, killing all aboard. A plane with no hydraulic control attempts a high-speed emergency landing. As the plane touches down, it begins to cartwheel and the plane rips apart into fiery shards of wreckage. These words inspire powerful and tragic images, but none so powerful as a re-creation of the last five minutes of the flight, accompanied by the actual audio from the cockpit voice recorder. The video depicts the breakup of a plane, followed by actual footage of the crash shot by an amateur photographer at the scene.

There is no doubt that this type of description would have a very dramatic impact in the courtroom and that many attorneys would relish the chance to have actual CVR audio and even video available for their own use. Airline pilots, how-

---

89 See id.
90 See Institute of Medicine, To Err Is Human: Building a Safer Health System (Linda T. Kohn et al. eds., 2000).
91 Id. at 5 (citation omitted) (citing Donald M. Berwick & Lucian L. Leape, Reducing Errors in Medicine 136-37 (1999)).
93 Id.
95 Richard F. Schaden, Making Them Fly: Re-Creations and Animations in Aviation Litigation, in 2 Assoc. of Trial Lawyers of America (ATLA)-CLE 1738 (2001) (this article was included in the Annual Convention Reference Materials for ATLA's Aviation Law Section) (emphasis added).
96 The accidents alluded to above were real accidents that occurred at a time when actual CVR audiotapes were sol
ever, are disturbed by such possibilities. It is potentially their dying words that would be broadcast in the courtroom for their families and, shockingly, their local television affiliates to hear. That was not the original intent of pilots’ acquiescence to the introduction of CVRs into their cockpits.

In order to preserve the pilots’ expectations of privacy, and to restrict use of CVR tape recordings to their originally intended use, Congress amended the Independent Safety Board Act (“ISBA”) in 1990, formulating a bright line rule to clearly define the permissible uses of CVRs and their products.

3. The Bright Line Rule

Congress’ intent in adopting the new amendment was to “restrict the ability of litigants to misuse the recording or transcription in a lawsuit by setting standards for discovery.” Thus, the law severely restricts access to CVR tapes and transcripts outside the realm of accident investigation. Litigants are granted access to tapes only if a fair judicial proceeding cannot be had without them and then only with a limiting protective order. Being balanced is the promise that the information gathered in the cockpit would be used strictly for accident investigation, and the realization that, if a fair judicial proceeding cannot be had without them, access to the information should be limited. Not everyone understands this balancing test. For example, one commentator believes that requiring the NTSB to release transcripts creates “an enormous loophole” by making them discoverable. This perspective fails to recognize the very strict language that governs discovery. Moreover, information of real use is already available in the NTSB’s public docket; hearing the recording in chambers is not likely to enrich discovery.

When he signed the 1990 ISBA changes into law, President George H.W. Bush commented that “[i]t is important to protect these materials from sensationalism and unwarranted disclosure, but it is also important that courts provide prompt and complete disclosure to litigants with an interest in judicial proceedings involving aircraft accidents.” Given the strict constraints put on discovery of CVR tapes and the non-public portions of their transcripts, it is facially apparent that “prompt and complete disclosure” is not part of Congress’ intent.

The ISBA amendments’ additional restrictions foreclose access to information through the FOIA. Despite the FOIA’s pro-disclosure bias,

In two incidents outlined in testimony before the Committee... the transcription in one case and the recording in another case were released to the public in an inappropriate manner. All parties to an accident investigation recognize both the right to privacy of the individual crewmembers and the need to conduct a fair investigation. This section seeks to maintain a balance between those interests. The section is not intended, however, to restrict the parties to the investigation in any way from access to the CVR information, prior to public disclosure, for purposes of the investigation.

This is more in line with the original intent of the law governing CVRs. See Installation of Cockpit Voice Recorders in Large Airplanes Used by an Air Carrier or Commercial Operator, 29 Fed. Reg. at 8401.

This amendment limits release of CVR information, specifies when it can be released, and permits discovery of the transcription and recording only in certain limited circumstances. Section 306 of the Independent Safety Board Act provides that CVR recordings and transcripts are not to be released, except that portions of the transcriptions of oral communications by and between the flight crew members and ground stations are to be made available to the public at the time of the public hearing or no later than 60 days following an accident or incident under investigation. The amendment also changes section 306 to restrict the ability of litigants to misuse the recording or transcription in a lawsuit by setting standards for discovery and requiring that, if discovery of non-public portions of a recording or transcript is obtained, a protective order limiting the use of the information to that proceeding must be issued. It also prohibits dissemination of the recording or portion to anyone who does not need the information for the proceeding. This provision is intended to eliminate the use of such information except to ensure that litigants are able to receive a fair trial.

as strictly controlled as they are now. See id.

See O’Connor, 480 U.S. at 718.


See Id.

This amendment limits release of CVR information, specifies when it can be released, and permits discovery of the transcription and recording only in certain limited circumstances. Section 306 of the Independent Safety Board Act provides that CVR recordings and transcripts are not to be released, except that portions of the transcriptions of oral communications by and between the flight crew members and ground stations are to be made available to the public at the time of the public hearing or no later than 60 days following an accident or incident under investigation. The amendment also changes section 306 to restrict the ability of litigants to misuse the recording or transcription in a lawsuit by setting standards for discovery and requiring that, if discovery of non-public portions of a recording or transcript is obtained, a protective order limiting the use of the information to that proceeding must be issued. It also prohibits dissemination of the recording or portion to anyone who does not need the information for the proceeding. This provision is intended to eliminate the use of such information except to ensure that litigants are able to receive a fair trial.

In two incidents outlined in testimony before the Committee... the transcription in one case and the recording in another case were released to the public in an inappropriate manner. All parties to an accident investigation recognize both the right to privacy of the individual crewmembers and the need to conduct a fair investigation. This section seeks to maintain a balance between those interests. The section is not intended, however, to restrict the parties to the investigation in any way from access to the CVR information, prior to public disclosure, for purposes of the investigation.

Id. at 104 Stat. 6381 (emphasis added).

This is more in line with the original intent of the law governing CVRs. See Installation of Cockpit Voice Recorders in Large Airplanes Used by an Air Carrier or Commercial Operator, 29 Fed. Reg. at 8401.


Id.


H.R. Conf. Rep. 97-864, at 3043. The "enormous loophole" is not a loophole at all, but is in concert with the original intent to treat actual recordings differently than transcripts and other data.

See President’s Signing Statement, ISBA Amendments of 1990, 104 Stat. 6381-1.

See Robbins, 437 U.S. at 220.
the 1990 ISBA changes fit precisely within one of the FOIA exemptions.\textsuperscript{107} The mandate to disclose information under the FOIA does not apply to matters that are: "specifically exempted from disclosure by statute . . . provided that such statute (A) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (B) establishes particular criteria for withholding or refers to particular types of matter to be withheld."\textsuperscript{108} Thus, CVR recordings cannot be reached via a FOIA request.

B. Their Dying Utterances

Congress has twice revisited the original legislation in order to restrict the use of CVR tapes and transcripts to the originally stated purpose of aircraft accident investigation. The FAA does not use CVRs to extract civil penalties;\textsuperscript{109} discovery is strictly limited to circumstances where a fair judicial proceeding cannot be had without them; and, the FOIA further limits the availability of CVR information. Nevertheless, there is still an issue of disclosure that lies outside the area of accident investigation. Simply stated, pilots and others are willing to tolerate the invasion of their privacy in the interests of public safety. But they are not willing to tolerate an invasion so that their loved ones can hear their dying screams on the evening news,\textsuperscript{110} or so that their grieving survivors can sue for the pilots’ alleged negligence. Over time, however, portions of the transcripts germane to an accident are released to the public, including the media\textsuperscript{111} and interested attorneys. Little, if anything, is gained by this wider distribution.

In the aftermath of a Delta 727 crash in Dallas on August 31, 1988, a Texas state court ordered the release of the CVR tape through discovery.\textsuperscript{112} It ended up being played on the evening news\textsuperscript{113} and, more recently, has been available on the Internet. The airing of the tape on the evening news preceded the ISBA amendments in 1990, which placed tighter restrictions on the release of CVR tapes and, in fact, is what gave rise to those amendments.\textsuperscript{114} To the horror of survivors, however, some tapes still find their way to the public.

Foreign governments’ accident investigations often are not as restricted as those of U.S. agencies,\textsuperscript{115} and this can result in release of a CVR tape to unintended recipients. Following the crash of

---

\textsuperscript{107} See Rose, 425 U.S. at 361 (emphasizing that the FOIA exemptions must be narrowly construed).


\textsuperscript{109} 14 C.F.R. §91.609(g) (2000) (applying to flight operations in general); 14 C.F.R. §121.359(h) (2000) (applying to air carrier operations).

\textsuperscript{110} Families normally are not privy to CVR tapes, but in the aftermath of the crash of United Flight 93 in Pennsylvania on September 11, 2001, some family members asked to hear the CVR tapes. The FBI—not the NTSB—agreed to it. See John Curran, FBI to Let Relatives of Flight 93 Victims Hear Cockpit Recordings, CHATTANOOGA TIMES/CHATTANOOGA FREE PRESS, Mar. 26, 2002, at A5:

"I don’t know what I’m going to hear, but I need to hear it," said Patrick Welsh, whose 49-year-old-wife, Deborah, was the lead Flight attendant on board. "It’s going to be a horrific thing to listen to. In some ways it may appear almost masochistic, after what all of us have been through. But you’re trying to find a truth, trying to get some more information about the events."

***

The National Transportation Safety Board, which investigates aviation accidents, has never allowed relatives to listen to cockpit tapes, spokesman Ted Lopatkiewicz said. Under federal law, the safety board cannot release the tapes and can only give out transcripts during a public hearing or when a majority of factual reports on the crash are completed, Lopatkiewicz said.

***

Welsh lauded the government’s decision, saying it balanced family members’ right to know with privacy considerations.

\textit{Id.}


\textsuperscript{112} See Johnson, supra note 63, at 5.

\textsuperscript{113} Id.

\textsuperscript{114} Id.

\textsuperscript{115} See Press Release, Air Line Pilots Association, Pilots Angered Over Use of Cockpit Voice Recorder on "Dateline:
an American 757 during an approach into Cali, Colombia on the night of December 20, 1995, an agency of the Colombian government conducted the post-crash investigation with technical assistance from the NTSB.\textsuperscript{116} Somehow, a copy of the CVR audio tape ended up in the possession of the NBC television network, which, despite requests not to do so, aired portions of the tape as part of a story on their program, \textit{Dateline: NBC}, on January 19, 2000.\textsuperscript{117} Since the NTSB is prohibited from releasing CVR tapes\textsuperscript{118} and courts are severely restricted from allowing their use in discovery,\textsuperscript{119} the tape apparently had been obtained from an unofficial source, leaving no method to prevent its broadcast. The airing of the tape was criticized by then NTSB Chairman Jim Hall.\textsuperscript{120} Hall's criticism was echoed by the Allied Pilots Association ("APA"),\textsuperscript{121} which represents the American pilots, and by ALPA.\textsuperscript{122} The Cali accident is discussed in more detail below.

There is also the issue of CVR ownership. At the completion of an investigation, the CVR tape is returned to the aircraft's operator.\textsuperscript{123} While statutes restrict what NTSB and the courts may do with the CVR tape,\textsuperscript{124} there are no such restrictions on the tape's owner. Universal access afforded by the Internet then becomes an issue. If a person enters the appropriate search criteria into any competent Internet search engine, he will find a number of Web sites that have actual CVR recordings.

Some are innocuous, but some are grisly and not for the faint of heart.

Bolstering the privacy interest argument are two cases from the United States Court of Appeals for the District of Columbia Circuit ("D.C. Circuit"). Section (b)(6) of the FOIA permits withholding of "personnel/medical and other files disclosure of which would violate personal privacy."\textsuperscript{125} Drawing from this wording, the D.C. Circuit held that the release of an autopsy report by the Air Force would "shock the sensibilities of surviving kin"\textsuperscript{126} and "constitute a 'clearly unwarranted invasion of personal privacy.'"\textsuperscript{127}

Six months after the destruction of the space shuttle Challenger in 1986, which killed all seven astronauts aboard, a reporter from the \textit{New York Times} submitted a FOIA request to NASA for transcripts and copies of all voice and data communications recorded on the ill-fated shuttle. In \textit{New York Times v. National Aeronautics and Space Administration},\textsuperscript{128} the reporter argued that the public had a "strong interest"\textsuperscript{129} in disclosure because it was "the best available record of governmental activity" aboard the Challenger in the moments just prior to the accident.\textsuperscript{130} The reporter also argued that the public "has a strong and legitimate interest in gaining a full understanding of the disaster, and of the conduct of the agency and its employees in the events and activities during and after that incident."\textsuperscript{131}

The trial court ordered the release of the

\begin{footnotesize}
\textsuperscript{117} \textbf{Id.}
\textsuperscript{118} See 49 U.S.C. §114(c) (1994).
\textsuperscript{120} See Press Release, NTSB, Statement by NTSB Chairman Jim Hall on Broadcasting of Cockpit Voice Recorder Tape (Jan. 19, 2000), at http://www.NTSB.gov/Pressrel/2000/000119.htm (last visited Oct. 30, 2000). Hall stated, "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 such a purpose is inappropriate. It does nothing to advance the cause of aviation safety, but as an exploitative and sensationalistic public spectacle on the airwaves.” \textbf{Id.}
\textsuperscript{121} See \textit{Allied Pilots Association, APA INFORMATION HOTLINE}, at http://www.alliedpilots.org/Public/Hotline/prevhl.asp?id=200001120 (Jan. 20, 2000).
\textsuperscript{122} See Pilots Angered Over Use of Cockpit Voice Recorder on “Dateline: NBC,” supra note 115.
\textsuperscript{123} See \textit{Press Release, NTSB, Statement by NTSB Chairman Jim Hall on Broadcasting of Cockpit Voice Recorder Tape (Jan. 19, 2000), at http://www.NTSB.gov/Pressrel/2000/000119.htm (last visited Oct. 30, 2000). Hall stated, “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.” \textbf{Id.}
\textsuperscript{125} See Pilots Angered Over Use of Cockpit Voice Recorder on “Dateline: NBC,” supra note 115.
\textsuperscript{126} What ‘\textit{Dateline: NBC}’ did was outrageous and absolutely inexcusable. This is every airline pilot’s worst nightmare, to have what often turns out to be the last few minutes of his life made public, not for any advancement of aviation safety, but as an exploitative and sensationalistic public spectacle on the airwaves.
\textsuperscript{127} \textbf{Id.}
\textsuperscript{130} 5 U.S.C. §552(b)(6) (2000). (emphasis added). The FOIA at section 552(b)(3) also exempts from disclosure anything specifically exempted by statute “provided that such statute (A) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (B) establishes particular criteria for withholding or refers to particular types of matters to be withheld.” \textbf{Id.}
\textsuperscript{131} See \textit{Press Release, NTSB, Statement by NTSB Chairman Jim Hall on Broadcasting of Cockpit Voice Recorder Tape (Jan. 19, 2000), at http://www.NTSB.gov/Pressrel/2000/000119.htm (last visited Oct. 30, 2000). Hall stated, “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.” \textbf{Id.}
\textsuperscript{127} \textit{Id.} (emphasis added).
\textsuperscript{128} \textit{782 F. Supp 628 (D.D.C. 1991).}
\textsuperscript{129} \textit{Id. at 632.}
\textsuperscript{130} \textit{Id.}
\textsuperscript{131} \textit{Id.}
\end{footnotesize}
tape. After appeals and rehearings, the D.C. Circuit agreed that the public had a legitimate interest in learning about NASA's conduct, but held that the tape's release would not further that interest "in any way." In so deciding, the court relied on a then recent Supreme Court opinion in which the Court upheld the FBI's refusal to disclose the "rap sheet" of a private citizen under the FOIA. In United States Department of Justice v. Reporters Committee for Freedom of the Press, the Supreme Court applied the following standard in holding that the public interest was insufficient to require disclosure:

The basic policy of "full agency disclosure . . . focuses on the citizens' right to be informed about what their government is up to." Official information that sheds light on an agency's performance of its statutory duties falls squarely within that statutory purpose. That purpose, however, is not fostered by disclosure of information about private citizens that is accumulated in various governmental files but that reveals little or nothing about an agency's own conduct . . . . Indeed, response to this request would not shed any light on the conduct of any Government agency or official.

The Court went on to reiterate that Congress's "core purpose" in creating the FOIA was to contribute "significantly to public understanding of the operations or activities of the government." In National Aeronautics and Space Administration, the plaintiff argued that the "voice inflections and background noises which are contained only in the tape would 'contribute significantly' to the public's understanding of the operations of NASA." The court found, however, that "any voice inflections and background noises [on the tape] . . . might reveal something as to whether the astronauts knew about the disaster and their impending deaths." This would not contribute "anything to the public's knowledge of how NASA operates." The plaintiff needed to produce more evidence to make the release of the tape worthwhile under the FOIA standard.

The court did find it significant that NASA had provided the public with a transcript of the tape.

This transcript reveals to the public every word that was spoken in the cabin. Plaintiff does not dispute its accuracy, but hypothesizes that information can still be gained from voice inflections and background noises. The extremely speculative and subjective nature of this additional information, if available, precludes any finding the information would "significantly contribute" to the public understanding of the Challenger disaster.

The Court thus found that the public interest in disclosing the actual recordings was minimal or nonexistent.

Having determined that releasing the CVR tape would not contribute significantly to the public's understanding of NASA or the Challenger accident, the court next undertook a balancing test to determine whether the disclosure of the tape "would constitute a clearly unwarranted invasion of personal privacy." In doing so, the court followed the precedent of O'Connor v. Ortega, which concluded that a person has "a reasonable expectation of privacy in his office." On one hand, the National Aeronautics and Space Administration court held that the "clearly unwarranted" language of the FOIA exemption 6 weighs the scales in favor of disclosure. On the other hand, however, it determined that "where the privacy interest is substantial, the public interest uncertain, and where the agency has already released materials responsive to the request, the balance tips towards non-disclosure." The court concluded:

The Challenger families have a substantial privacy interest in non-disclosure of the tape. Plaintiff has asserted at best a speculative public interest in disclosure. NASA has made a written transcript of the tape available to the public. Thus, the Court determines that the privacy interest in non-disclosure clearly outweighs the public interest.

Thus, the court held that no one outside the accident investigation scheme—at least no one from the media—had a legitimate interest in hearing the astronauts' dying utterances. This holding thus addresses the piloting community's privacy objections concerning the release of CVR tapes. Their other objection involves the problem that may arise from releasing CVR tapes to the legal establishment.
C. Litigation

Since Congress did not intend "prompt and complete disclosure" of CVR tapes and unreleased portions of transcripts, how, then, do attorneys gain access to materials for litigation purposes? It turns out that the readily available products of both CVRs and FDRs are frequently used by both sides in litigation—often, with decisive results. Access to actual recordings is simply unnecessary.

In the wake of American Flight 965’s crash in the mountains near Cali, Colombia in 1995 that killed all but four people aboard, multiple liability claims arose against American and others. One case against American, In re Air Crash Near Cali, Columbia on December 20, 1995, that involved the pilots’ estates and American’s parent company, made effective use of a transcription of the CVR tape in a successful motion for summary judgment.149

In Cali, the aircraft approached from the north, and the pilots wanted to land to the south. In other words, the pilots wanted to land the plane straight ahead rather than by having to overfly the airport and turn back around, which would have added several minutes to an already delayed flight. The clearance for this approach came late in the arrival process, so the pilots had to expedite their descent. The CVR transcript shows that the pilots entered an incorrect navigation fix into the computer, resulting in the aircraft turning east into mountainous terrain while in descent. The pilots were evidently unaware of how far off track they were and probably could see nothing outside the airplane in the dark of night. The aircraft’s Ground Proximity Warning System ("GPWS") warned them of the approaching terrain too late. The aircraft crashed 13 seconds later.

The Cali court relied heavily on the CVR transcript in entering summary judgment for the plaintiffs. [O]ne of [the pilots'] grievous errors—their continued descent from a position that was radically off course at night in an environment where the risk from high terrain was palpable and profound—was so plainly reckless, so dangerous, so extreme a violation of the standard of care and so directly responsible for the collision with the mountain—that even allowing the Defendant every benefit of the doubt, the law requires that summary judgment be entered for the Plaintiffs on this basis alone.

Without the detailed information provided by the transcripts, a clear understanding of why this airplane crashed likely would never have been found. Moreover, proving liability would have been difficult, making summary judgment unlikely. Here, access to the actual tapes was unnecessary because the transcripts were sufficient to persuade the court to rule in the plaintiff’s favor.

In an intriguing twist, the Cali court had access to two transcripts and the audio tape. The transcript used by the plaintiffs in their motion was obtained from the NTSB, and the other was produced by an expert retained by American. The record does not show how the court came to its conclusions. Id.

150 Id. at 1111.
151 Id.
152 Id. at 1118.
153 Id. at 1119.
154 Id. at 1138.
155 See Honeywell International, Inc.’s Enhanced Ground Proximity Warning System (EGPWS), at http://www.egpws.com/ (last visited Oct. 24, 2002). The Web site provides one manufacturer’s informative descriptions of the newest technologies available to warn pilots about impending controlled flight into terrain ("CFIT") and provides an audio example of the aural warning. GPWS and its younger sibling EGPWS provide cockpit warnings concerning approaching terrain. Older systems were triggered by either the aircraft’s height above terrain as measured by a radio altimeter or an excessive rate of descent. The newest systems generate warnings by comparing present aircraft position to an onboard database of terrain elevations. Since the EGPWS systems “look” at the area in front of an aircraft and not just straight down, they can warn pilots of rising terrain in front of their aircraft, thereby giving precious additional time to make cor-
into possession of the tape.\textsuperscript{163} Considering that Colombian authorities, not the NTSB, conducted this investigation, and that American Airlines ("American") was the owner of the CVR,\textsuperscript{164} it is probable that the tape came from one of these two sources.\textsuperscript{165}

Two issues arise from this twist of circumstance. First, the audio recording's availability did not alter the case's outcome. In fact, the opinion only mentions the recording, which was played in chambers with both counsel present,\textsuperscript{166} when it discusses the differences between the two transcripts.\textsuperscript{167} It appears that comparing the two transcripts and the tape merely demonstrated that the American-produced transcript benefited the airline, while the NTSB's transcript more accurately reflected the recording.\textsuperscript{168} This outcome supports continued reliance on transcripts produced by neutral experts and also argues against litigants' discovery of recordings.

The evidence provided by the CVR transcripts, however, demonstrated American's liability clearly enough to support the motion for summary judgment.\textsuperscript{169} As American and the court both learned, possession of the actual recording did not provide any additional evidence, alter the dramatic story told in the NTSB transcript, or change the case's outcome.

The second issue that arises in the context of litigation involves access to the tapes. At the completion of an investigation, the tape is returned to the aircraft operator.\textsuperscript{170} If one side in a case has a copy of the tape, it would seem only fair that opponents have access as well. In \textit{Cali}, both sides evidently had access to the CVR tape because it was "reviewed in chambers and in the presence of counsel."\textsuperscript{171} Barring a similar set of circumstances, where the recording apparently is released by an entity other than the NTSB, there can be a perception that if the federal government is a litigant, the government might have an advantage in the case. The reality, however, is that while the tape is in the government's possession, it is with the NTSB for an accident investigation\textsuperscript{172} or the FBI for a criminal investigation,\textsuperscript{173} but is not available to other agencies not directly involved in the investigation.\textsuperscript{174}

The conundrum produced by the government's possession of a tape is addressed tangentially in the case, \textit{McGilvra v. National Transportation Safety Board}, involving the crash of a United Airlines 737 on March 3, 1991 while it was on approach to the airport in Colorado Springs, Colorado.\textsuperscript{175} All of those aboard were killed, including a relative of Jack McGilvra.\textsuperscript{176} McGilvra sought a copy of the CVR tape through the FOIA.\textsuperscript{177} The NTSB refused to release the tape, citing section 1905(c) of the Independent Safety Board Act.\textsuperscript{178} On appeal, the NTSB's Managing Director again denied release of the tape.\textsuperscript{179} This last denial led McGilvra to file suit in the Federal District Court in the District of Colorado seeking a copy of the tape for accident reconstruction purposes.\textsuperscript{180} McGilvra submitted three arguments to support his claim: (1) the statutory prohibition regarding NTSB release found in section 1905 of the ISBA\textsuperscript{181} was not a FOIA exemption; (2) the tape should be released pursuant to section 1903(d)(3) of the ISBA because it was necessary for a fair trial; and (3) that section 1905 of the ISBA was unconstitutional.\textsuperscript{182}

The court did not accept any of McGilvra's arguments.\textsuperscript{183} The court determined that the statute qualified as a FOIA exemption.\textsuperscript{184} Therefore, it did not have the authority to grant discovery under section 1905(d)(3) of the ISBA.

This court is not oblivious to the seeming unfairness of the practical impact of the above cited statutes: to allow

\textsuperscript{163} See generally, \textit{Cali}, 985 F. Supp. at 1153-54.
\textsuperscript{165} \textit{Cali}, 985 F. Supp. at 1115. The court noted in its order that the differences between the transcripts were "generally of little moment" as determined by the judge after having listened to the tape. \textit{Id.}
\textsuperscript{166} \textit{Id.} at 1140 n.21.
\textsuperscript{167} \textit{Id.}
\textsuperscript{168} \textit{Id.} at 1134 n.18, 1139 n.21.
\textsuperscript{169} \textit{Id.} at 1153.
\textsuperscript{170} See \textit{Investigator's Manual}, supra note 125, at 3-148.
\textsuperscript{171} \textit{Cali}, 965 F.Supp at 1139 n.21.
\textsuperscript{172} See \textit{Investigator's Manual}, supra note 125, at 3-148.
\textsuperscript{173} See NTSB Providing Technical Assistance to FBI Investigation, supra note 7.
\textsuperscript{174} See \textit{Investigator's Manual}, supra note 125, at 3-148.
\textsuperscript{175} McGilvra v. Nat'l Transportation Safety Bd., 840 F.Supp 100 (Colo. 1993).
\textsuperscript{176} See id. The published opinion does not describe plaintiff's relationship to the decedent, Paula McGilvra. \textit{Id.}
\textsuperscript{177} McGilvra, 840 F.Supp. at 101.
\textsuperscript{178} See ISBA Amendments of 1990, supra, note 98.
\textsuperscript{179} McGilvra, 840 F.Supp. at 101.
\textsuperscript{180} \textit{Id.}
\textsuperscript{181} See ISBA Amendments of 1990, supra, note 98. (Title 49 has been partially revised, placing these restrictions in a new section. The current citation is 49 U.S.C. §1154 (2000)).
\textsuperscript{182} \textit{McGilvra}, 840 F. Supp. at 101.
\textsuperscript{183} \textit{Id.}
\textsuperscript{184} \textit{Id.} at 102.
representatives of defendants in air crash cases access to CVR tapes in their capacities as parties designated to participate in the investigation, while denying plaintiffs and their representatives and expert investigators equal access to the facts. This argument, however, must be addressed to Congress, not to a court where, as here, the intent of Congress is clear.\textsuperscript{185}

Thus, the court recognized the government's legitimate requirement to withhold a CVR tape from a plaintiff seeking it for litigation purposes.

Another case is also illustrative. During the night of September 1, 1983, Soviet fighters shot down Korean Airlines ("KAL") Flight 007, when it strayed from its planned route into Soviet airspace over the Sea of Japan.\textsuperscript{186} The FDR and CVR were recovered by Soviet authorities and held for almost a decade.\textsuperscript{187} Meanwhile, \textit{In re Korean Air Lines Disaster of September 1, 1983}, a consolidation of some 190 cases, a jury returned a verdict that the 747's loss and the deaths of everyone on board were proximately caused by the willful misconduct of KAL Flight 007's pilots.\textsuperscript{188} The decision was upheld, but punitive damages were vacated pursuant to the Warsaw Convention.\textsuperscript{189}

In October 1992, after the Soviet Union's collapse, and more than nine years after KAL Flight 007 was shot down, the Russian Federation released documentation surrounding the incident.\textsuperscript{190} This was followed by the release of the CVR and FDR from KAL 007, along with recordings and transcripts of the conversations of the Soviet fighter pilots responsible for shooting down the airliner.\textsuperscript{191} In June of 1993, based on this newly acquired information, ICAO issued a report that shed some light on the events of September 1, 1983.\textsuperscript{192} Armed with this report, KAL filed a motion to vacate and set aside the earlier judgment.\textsuperscript{193} The motion was denied under Federal Rule of Civil Procedure 60(b)(2)\textsuperscript{194} because the recorders and their information were considered "newly discovered evidence" which was not submitted within the Rule's one-year time limit.\textsuperscript{195} The court also held that the ICAO report and the information on the recorders supported the jury's guilty verdict,\textsuperscript{196} and accordingly, it denied KAL's motion for equitable relief.\textsuperscript{197}

While KAL could not avail itself of the information available from the recorders, others could. Eric Forman, the husband of a passenger killed on KAL Flight 007, made use of the data from the CVR and FDR.\textsuperscript{198} In \textit{Forman v. Korean Air Lines}, Forman was awarded damages for his wife's pre-death pain and suffering.\textsuperscript{199} The court reversed other jury awards.\textsuperscript{200} Both KAL and Forman appealed.\textsuperscript{201} The D.C. Circuit upheld the award for the wife's pre-death pain and suffering.\textsuperscript{202} This decision was based largely on the information from the recorders,\textsuperscript{203} but no one had to hear the actual recordings to make the award determination.\textsuperscript{204}

The issue of passenger pre-death pain and suffering turned on a determination of whether or not those aboard the doomed airplane could have survived the initial explosion caused by the missile.\textsuperscript{205} Each side produced expert witnesses testifying to support their contentions that the occupants of the airplane did or did not survive the initial explosion and loss of pressurization long enough to have experienced any physical pain and suffering.\textsuperscript{206} While earlier cases were forced to rely on expert speculation, the \textit{Forman} court had the benefit of the information from the recorders.

The ICAO report showed that the FDR continued to run for at least 104 seconds after the missile's impact.\textsuperscript{207} No mention is made as to whether the recorders stopped because the FDR lost power or because the aircraft broke apart. KAL argued that the missile must have blown a

\textsuperscript{185} \textit{Id.} at 102 (emphasis added).
\textsuperscript{186} See \textit{In re Korean Air Lines Disaster of September 1, 1983}, 932 F.2d 1475, 1478 (D.C. Cir. 1991).
\textsuperscript{188} \textit{Korean}, 932 F.2d at 1477.
\textsuperscript{189} \textit{Korean}, 156 F.R.D. at 14.
\textsuperscript{190} \textit{Id.} at 20.
\textsuperscript{191} \textit{Id.}
\textsuperscript{192} \textit{Id.}
\textsuperscript{193} \textit{Id.}
\textsuperscript{194} \textit{Id.}
\textsuperscript{195} \textit{Id.} at 22.
\textsuperscript{196} \textit{Id.}
\textsuperscript{197} \textit{Id.} at 25.
\textsuperscript{199} \textit{Id.} at 448.
\textsuperscript{200} \textit{Id.}
\textsuperscript{201} \textit{Id.} at 447.
\textsuperscript{202} \textit{Id.}
\textsuperscript{203} \textit{Id.} at 449.
\textsuperscript{204} \textit{Id.} (explaining that expert testimony provided the requisite evidence for the court to make its determination. No mention is made of publicly playing the CVR audio tapes.).
\textsuperscript{205} \textit{Id.} at 448.
\textsuperscript{206} \textit{Id.}
\textsuperscript{207} \textit{Id.} at 449.
large hole in the fuselage, thus equalizing the pressure inside the cabin with the pressure outside at 35,000 feet, rendering the passengers unconscious and "thus anesthetized to pain." The CVR, however, "captured the flight crew's post impact actions and utterances." Based on this information, Forman's experts testified that the passengers had enough time to put their oxygen masks on and remain conscious for the 9 to 12 minute descent to the ocean. This was ample time for the passengers to suffer anguish from the specter of the impending crash and physical pain from rapid decompression. Thus, this crucial sliver of evidence from the CVR that was delivered by the ICAO's written report was the lynchpin in this successful pursuit of damages for pain and suffering. Access to the CVR tape itself was unnecessary.

Attorneys who seek access to actual CVR recordings often argue that because the NTSB's initial findings are not admissible in court, the attorneys must assemble their own team of experts, including CVR speech pathologists, to supplement the small amount of available information. A recent example, however, serves to demonstrate that even the written words of a CVR transcript can produce rich evidentiary material.

On December 15, 1993, a Westwind business jet crashed while on approach to John Wayne Airport in Santa Ana, California. The small airplane encountered violent wake turbulence and became uncontrollable when it followed too closely to a Boeing 757. The results of the crash became the subject of Management Activities, Inc. v. United States. The Westwind CVR transcript, used in a cross-claim action against the government alleging negligence by the FAA, indicated pilot error. The opinion points out that "[a] reasonable Westwind pilot . . . [in these circumstances] would be very concerned about potential wake turbulence affecting much smaller aircraft." The CVR transcript contained several statements by the pilots indicating that they were aware of their aircraft's proximity to the 757 and that they "realize[d] they were flying into danger." The transcript indicated that at least one pilot was "concerned." Unfortunately, this pilot's concern did not translate into a response necessary to avert the crash. Nonetheless, the CVR transcript provided sufficient information to show that the pilots were concerned by circumstances they had gotten themselves into.

D. Criminal Investigations and Prosecutions: The Current Battleground

Congress amended the CVR statute again in 2000. The amendment extended the restrictions on public disclosure to "voice and video recorder information for all modes of transportation comparable to the protections already statutorily provided for cockpit voice recorders."
The amendment also reiterated the confidentiality of recordings, created procedures for the NTSB to turn over its investigation to the FBI in the event of an intentional criminal act, and directed the NTSB and FBI to revise their existing agreement accordingly.\(^\text{225}\) The amendment is silent on confidentiality of CVR tapes in the context of an FBI criminal investigation. However, the underlying original intent that recorders and their products will be used solely for investigative purposes remains, and no government agency should be permitted to release more than the NTSB is permitted to release.

Confidentiality of CVR tapes is coming into play in the government’s case against suspected terrorist Zacarias Moussaoui.\(^\text{226}\) Moussaoui was indicted on December 11, 2001 on six counts of conspiracy for alleged acts tied to the events of September 11, 2001.\(^\text{227}\) In preparation for its plans to play the CVR tapes during the trial, the Government moved for a protective order pursuant to the section 1154 of the NTSB’s enabling statute.\(^\text{228}\) This section provides:

(4) (A) 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.

(B) 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.\(^\text{229}\)

Gannett Satellite Information Network, Inc. ("Gannett"), publisher of USA Today, opposed the government’s motion.\(^\text{230}\) Gannett argued that the public has a First Amendment right of public access to the trial and that this right includes access to all documents that are submitted during the course of the trial.\(^\text{231}\)

In its reply brief, the ALPA argued that the CVR statute specifically prohibits releasing the tapes.\(^\text{232}\) ALPA also asserted that both the Supreme Court and the United States Court of Appeals for the Fourth Circuit have upheld withholding sensitive evidence from the public in the past, including audio tapes from the media.\(^\text{233}\) ALPA argued that in order to maintain confidentiality, access to the tapes and transcripts presented during the hearing should be restricted.\(^\text{234}\) ALPA cited decisions upholding the exclusion of press and public from a criminal trial\(^\text{235}\) in order to demonstrate the lack of a constitutional or common law right of access to CVR tapes,\(^\text{236}\) and to demonstrate the restrictions in place to limit the media from gaining access to CVR audio tapes played in court.\(^\text{237}\)
IV. FUTURE DEVELOPMENTS

In the wake of the events of September 11, the FAA has proposed that video cameras be installed in airplane cabins.\textsuperscript{230} By looking at the feeds produced by the cameras, pilots then could monitor what is happening from behind their barricaded cockpit door.\textsuperscript{230} This proposal is only one part of the FAA’s new Enhanced Airplane Security Program.\textsuperscript{240} Long before September 11, however, the NTSB recommended that cockpit video recorders be used to supplement CVRs.\textsuperscript{241} For example, in April 2000, the NTSB recommended installing cockpit video recorders\textsuperscript{242} in planes, largely in response to the crash of an Egypt Air Boeing 767 into the Atlantic Ocean near Nantucket, Massachusetts on October 23, 1999.\textsuperscript{243} Although there is no conclusive evidence available concerning the Egypt Air crash, the CVR recording has led some to believe that the co-pilot may have crashed the plane deliberately.\textsuperscript{244} First, investigators concluded that there were no mechanical problems with the airplane when it crashed.\textsuperscript{245} Second, CVR information indicated that the copilot was alone in the cockpit and uttered what may have been a prayer\textsuperscript{246} before the autopilot was disengaged, and the aircraft plummeted into the ocean.\textsuperscript{247} During the high speed descent another voice, presumably belonging to the captain who had then returned from the lavatory, asked “[W]hat’s happening, Gamil? \textsuperscript{248} . . . “What is this? What is this? Did you shut the engine(s)?”\textsuperscript{249} The Egyptian Government has rejected the intentional crash theory as “unacceptable speculation.”\textsuperscript{250} The NTSB concluded that the probable cause of the accident was “the airplane’s departure from normal cruise flight, and subsequent impact with the Atlantic Ocean as a result of the relief first officer’s flight control inputs. The reason for the relief first officer’s actions was not determined.”\textsuperscript{251}

Regardless of the crash’s real cause, if a video recorder had been present in the cockpit, the investigators may have enjoyed an easier investigation process that yielded results having a higher degree of certainty. Accordingly, the NTSB recommended installing video recorders in cockpits.\textsuperscript{252} This proposal is still being reviewed, and it is likely to gain more attention in the post-September 11th world. If done properly, installation of cockpit video recorders could provide a useful tool for accident investigators. If not done properly, cockpit video recorders could provide an irresistible target for the media and for litigators who may be unable to resist exploiting these powerful and tragic images.
V. CONCLUSION

The original intent of placing CVRs aboard commercial airplanes is clear. They are to be used strictly for accident investigations. It is well-documented that CVRs have served the purpose of helping to find the cause of aircraft accidents and, thereby, helping to prevent reoccurrences. In addition, it has been well-documented that CVR tapes have been misused on occasion. These abuses have brought inexcusable grief to victims and their families. It also has forced Congress to further restrict access to tapes by invoking a bright line rule of acceptable usage.

The content of the cockpit conversations is not "privileged" from communication outside government accident investigations, but the playing of actual CVR tapes is, and must remain so. What was said, and what happened are readily ascertainable from transcripts and other publicly available data. It is not clear, then, that the narrow window currently available for discovery of CVR audio is of any justifiable use. As the Cali accident demonstrated, content of CVR tapes still make their way to the public, and the situation will likely worsen if cockpit videotapes become the norm. Without stringent restrictions, the public inevitably will see, as well as hear pilots' dying moments—to the glee of some, and the horror of others, including the families of the pilots left behind. To prevent what is otherwise inevitable, Congress and the courts must continue to guard pilots' rights to privacy and their privileged communications in their offices, the cockpits of the aircraft they fly.