

Sudden Loud Sound

Each aircraft had a sudden loud sound on the cockpit voice recorder at the confirmed time of the event. The sudden loud sound matched the decompression sound of a confirmed cargo door crash. The sudden loud sound never matches a bomb sound. Explosive decompression is an aviation term used to mean a sudden and rapid loss of cabin pressurization. A loud noise is associated with this event but not necessarily an explosion. The sudden loud sound is short only because power is cut to the cockpit voice recorder. Below is from NTSB Sound Spectrum Study, Chart 12., for four CVR sudden loud sounds. The duration is different because that was a variable of abrupt power cut, not the source of the noise, and all sounds end in less than a second.

United Airlines Flight 811:

"The CVR revealed normal communication before the decompression. At 0209:09:2 HST, a loud bang could be heard on the CVR. The loud bang was about 1.5 seconds after a "thump" was heard on the CVR for which one of the flightcrew made a comment. The electrical power to the CVR was lost for approximately 21.4 seconds following the loud bang. The CVR returned to normal operation at 0209:29 HST, and cockpit conversation continued to be recorded in a normal manner.

[NTSB Accident Report 92-02 Page 25](#)

Air India Flight 182:

"From the CVR and DFDR, AI 182 was proceeding normally en route from Montreal to London at an altitude of 31,000 feet and an indicated airspeed of 296 knots when the cockpit

area microphone detected a sudden loud sound. The sound continued for about 0.6 seconds, and then almost immediately, the line from the cockpit area microphone to the cockpit voice recorder at the rear of the pressure cabin was most probably broken. This was followed by a loss of electrical power to the recorder."

[Canadian Aviation Safety Board Air India 23 June 1985, page 21](#)

Pan Am Flight 103:

"The CVR tape was listened to for its full duration and there was no indication of anything abnormal with the aircraft, or unusual crew behaviour. The tape record ended, at 19:02:50 hrs +/- second, with a sudden loud sound on the CAM channel followed almost immediately by the cessation of recording whilst the crew were copying their transatlantic clearance from Shanwick ATC."

[UK AAIB Report 2/90 Page 15](#)

"It is not clear if the sound at the end of the recording is the result of the explosion or is from the break-up of the aircraft structure. The short period between the beginning of the event and the loss of electrical power suggests that the latter is more likely to be the case."

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Trans World Airlines Flight 800:

"So far, investigators have been frustrated in trying to decipher the only audible evidence of the blast, a sound heard for 130 milliseconds, or just over one-tenth of a second, before the recording abruptly ended. "

[News Reports from Associated Press, Reuters, major newspapers, press releases from NTSB, FBI](#)

Comment: The distinct crash similarities of aircraft type, radar returns, wreckage plot, sudden short loud sound, abrupt power cut, fodded engines, inflight damage, missing bodies, torn off noses, and start place of damage qualify three aircraft into one class from which the deduction may be made that one unifying cause had the same effects. Another accident with the same similarities except for a torn off nose and less wreckage may also be included in that class. The unifying cause for all four accidents is the inadvertent opening of the forward cargo door inflight. 27 Mar 97

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