Safety News

Concorde Trial Set

A manslaughter trial is scheduled for February 2010 for Continental Airlines, two Continental employees and three former aviation officials charged in connection with the July 25, 2000, crash of an Air France Concorde after takeoff from Paris Charles de Gaulle International Airport. The crash killed all 109 people in the airplane and four on the ground.

French prosecutors say the trial of Continental, a Continental maintenance technician, the airline's chief of maintenance, a former French civil aviation official and two former officials of the Concorde manufacturing program is expected to last about three months in a criminal court in Pontoise, a suburb of Paris.

The French Bureau d'Enquêtes et d'Analyses (BEA) said in its final report on the accident that the Concorde ran over a strip of metal that had fallen from a Continental McDonnell Douglas DC-10 during takeoff from the same runway several minutes earlier. The resulting tire failure sent pieces of tire into one of the Concorde's engines and a fuel tank; the subsequent fire and loss of control preceded the crash.

The BEA report said that the metal strip was a stainless steel wear strip from the DC-10's no. 3 engine. Maintenance records showed that wear strips on the engine fan reverser cowl had been replaced during scheduled maintenance performed by Israel Aircraft Industries in Tel Aviv on June 11, 2000. On July 9, maintenance personnel in Houston noticed that the lower left wear strip was twisted and sticking out of the cowl, and they replaced it. The BEA report said that the replacement was not performed in compliance with manufacturer specifications.

Wikimedia

Flight Safety Foundation and other aviation organizations have denounced the decision to proceed with criminal prosecutions.

"Absent willful intent or highly egregious conduct, we seriously question the basis for putting companies and aviation professionals through the ordeal of criminal prosecutions," said Foundation President and CEO William R. Voss. "In addition, we're very concerned that criminal prosecutions will discourage the free flow of information from operators to management to regulators, to the detriment of aviation safety."

Simulator Requirements

The U.S. Federal Aviation Administration (FAA) is proposing to require the use of flight simulators to enhance traditional air carrier training programs for flight crewmembers.

In a notice of proposed rulemaking (NPRM), the FAA said that the proposed change would require crewmembers to be trained and evaluated in "a complete flight crew environment." The proposal would require line oriented flight training (LOFT) in a full flight simulator during recurrent training, as well as training, testing and checking of flight crewmembers using a flight simulation training device.

Other requirements would include special hazard training on loss of control and controlled flight into terrain, additional training in crew resource management and annual performance drills for flight attendants using emergency equipment and procedures.

In addition, training and experience requirements for check dispatchers and dispatcher instructors would be standardized, supervised operating experience requirements would be put in place for aircraft dispatchers, and requalification training would be developed for aircraft dispatchers and crewmembers.

Another provision addresses runway safety goals with a requirement for operators to ensure that flight crewmembers use an airport diagram to help maintain positional awareness,

© Boeing

obtain proper clearances before crossing or entering active runways, observe runway hold lines and other markings and lighting intended for surface movement guidance, and ensure that their takeoff calculations have been performed using the correct runway information.

The changes prescribed by the proposal "make a significant contribution to the FAA's accident-reduction goal," the agency said.

The FAA said it would accept comments on the proposal until May 12.

Icing Warnings

A new safety alert from the U.S. National Transportation Safety Board (NTSB) says that pilots should activate leading-edge deice boots as soon as icing is encountered, unless the aircraft flight manual or pilot operating handbook specifically tells them not to do so (*ASW*, 12/08, p. 20).

"For 60 years, pilots have been taught to wait for a prescribed accumulation of leading-edge ice before activating the deice boots because of the believed threat of ice bridging," the NTSB said, referring to a theory that early activation of the boots might push the ice into a frozen "bridge" around the boot, making it ineffective.

However, the safety alert said, "ice bridging is extremely rare, if it exists at all. Early activation of the deice boots limits the effects of leading-edge ice and improves the operating safety margin."

The safety alert also cautioned pilots to "maintain extremely careful vigilance" about airspeed and aircraft handling qualities, especially if the aircraft flight manual or pilot operating handbook says that deice boots should not be activated until a specific amount of ice has accumulated.

The National Business Aviation Association (NBAA), however, urged operators to "continue to base their decisions about de-icing on their experience and judgment, because proving the existence of ice bridging after an accident is difficult, and many documented cases resulted in successful outcomes due to the skill and professionalism of the flight crew."

U.S. National Aeronautics and Space Administration

In a related appeal, the U.K. Civil Aviation Authority (CAA) cautioned pilots and ground crew "to not underestimate the dangers posed to aircraft of ice and ground frost this winter."

The CAA added, "Ultimately, an aircraft should never take off with any form of contamination on its surfaces, particularly ice, snow and frost, although some types may be permitted some frost on lower wing surfaces."

The CAA cited the January 2002 crash of a Bombardier Challenger 604 during takeoff from Birmingham International Airport, noting that the U.K. Air Accidents Investigation Branch had said in its final report on the accident that the airplane's left wing had stalled at "an abnormally low angle-of-attack due to flow disturbance resulting from frost contamination of the wing." All five people in the airplane were killed.

New Beacons

Now that the international program that coordinates the detection of distress signals has stopped monitoring signals from 121.5/243 MHz emergency locator transmitters (ELTs), civil aviation authorities are requiring aircraft to be equipped with 406 MHz ELTs.

The long-planned action by the International Cospas-Sarsat Programme took effect Feb. 1. Cospas-Sarsat said it made its decision in the 1990s in response to recommendations from the International Civil Aviation Organization and the International Maritime Organization, which several years ago acknowledged the superior speed and accuracy of 406 MHz beacons in relaying position information of aircraft and ships in distress.

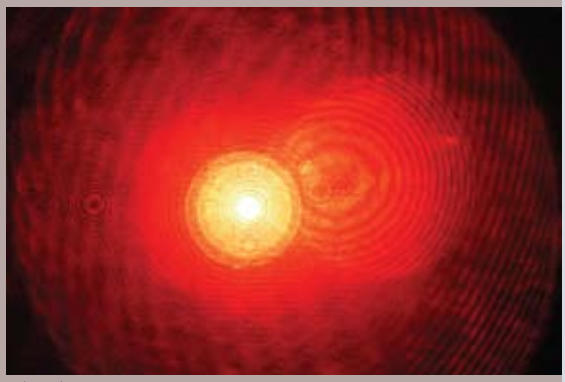
"With a 121.5/243 MHz beacon, only one alert out of every 50 alerts is a genuine distress situation," Cospas-Sarsat said. "This has significant effect on the resources of search and rescue services. With 406 MHz beacons, false alerts have been considerably reduced (about one alert in 17 is genuine), and when [beacons are] properly registered, [signals from 406 MHz beacons] can normally be resolved with a telephone call to the beacon owner using the encoded beacon identification. Consequently, real alerts can receive the attention they deserve."

ICAO previously required 406 MHz beacons on all international commercial passenger aircraft and now recommends their use on all other aircraft. In recent months, civil aviation authorities worldwide have begun changing their regulations to require a switch to 406 MHz ELTs.

The Cospas-Sarsat decision affects all ELTs; all maritime beacons, known as emergency position-indicating radio beacons (EPIRBs); and all personal locator beacons. Homing transmitters, man-overboard systems and other 121.5 MHz devices that do not require satellite detection are not affected.

© SERPE-IESM

Increase Reported in U.K. Laser Incidents



Wikimedia

Citing a "marked increase" in incidents in which powerful hand-held lasers have been pointed at aircraft in flight, the U.K. Civil Aviation Authority (CAA) has issued guidance to air navigation service providers (ANSPs) on reporting the events to law enforcement authorities.

"The CAA has become aware of a significant increase in the misuse of hand-held, high-powered lasers against aircraft in flight," the CAA said in an Air Traffic Services Information Notice (ATSIN). "Such lasers represent a danger not only to the safety of the aircraft but also to the health of the flight crew. To date, 150 instances have been reported to the CAA's Safety Investigation and Data Department."

The CAA said that, although detection, arrest and prosecution are handled by the appropriate law enforcement officials, ANSPs must promptly notify police of laser incidents. The ANSPs should "liaise with the local police force in order to establish the most expedient and appropriate means of contact between the [air traffic services] unit and the relevant police authority."

Filling the Gap

Automatic dependent surveillance-broadcast (ADS-B) air traffic surveillance technology has helped eliminate an 850,000-sq-km (382,187-sq-mi) gap in Canadian radar coverage over the Hudson Bay, Nav Canada says.

Nav Canada, which operates Canada's civil air navigation service, says that the use of ADS-B will provide for more efficient use of airspace over the bay for about 35,000 flights every year, as well as shorter flight times, lower fuel costs and reduced emissions of greenhouse gases.

The first flight across the bay using ADS-B was an Air New Zealand flight from London to Los Angeles on Jan. 15. Using ADS-B, controllers tracked the airplane on their displays as it was flown through Hudson Bay airspace, which previously had been without radar coverage.

In Other News ...

Australia, one of the first countries in the world to develop **multi-crew pilot license** (MPL) training, has graduated the first six students from an MPL program. The six cadets, from two Chinese airlines, completed flight assessments in December 2008. … The U.S. Federal Aviation Administration has lowered **Israel's** aviation safety standard rating following a 2008 evaluation of the Israeli civil aviation authority. The Category 2 rating is given to countries that lack laws or regulations to oversee air carriers in accordance with International Civil Aviation Organization (ICAO) standards or countries that do not meet ICAO standards in specified areas such as technical expertise and inspection procedures.

© Steven Day/Associated Press

Passengers on a US Airways Airbus A320 wait on the wings to be rescued by Hudson River ferries after the airplane was ditched on Jan. 15 following takeoff from LaGuardia Airport in New York. None of the 155 people in the airplane was killed; one person received serious injuries. Preliminary reports said that both engines lost power following multiple bird strikes.

Compiled and edited by Linda Werfelman.