Safety News

A380 Oil Leaks

An investigation has identified high oil-feed pipe deflection loads as a significant factor in in-flight engine oil leaks on two Qantas Airways Airbus A380s, the Australian Transport Safety Bureau (ATSB) says.

The ATSB said in its final report on the two 2011 incidents that examination and testing by Rolls-Royce, the manufacturer of the Trent 900 engines, determined that the oil leaks "were the result of a loss of clamping force on the oil-feed pipe connection at the engine casing."

Both incidents occurred during scheduled passenger flights from Singapore to London.

In the first incident discussed in the report, on Feb. 24, 2011, about eight hours after departure, the flight crew observed a reduction in the no. 3 engine's indicated oil tank quantity. They reduced engine thrust to idle and continued to London. Maintenance personnel subsequently found a leak from an external oil-feed pipe, which was finger tight.

There had been three similar oil leaks on other Qantas A380s, the report said.

By Nov. 3, the date of the second incident discussed in the report, 15 such engine oil leaks had been reported worldwide.

In the Nov. 3 incident, about three hours after departure, the crew observed a low oil quantity advisory for the no. 4 engine. That was followed 40 minutes later by a low oil pressure warning for the same engine. The crew shut down the engine and diverted to Dubai, United Arab Emirates.

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Maintenance personnel found a leak in an engine oil-feed pipe "in the same location as the earlier A380 engine oil loss events," the report said.

As a result of its investigations, the manufacturer modified the "oil pipe clipping arrangement and revised securing methods for the pipe connection and deflector assembly," the report said. "In addition, trend monitoring of engine oil consumption was enhanced and work continued to develop a new oil pipe design."

Volcanic Ash Guidance

The International Civil Aviation Organization (ICAO) has published a manual providing guidance for air transport operators in case of a volcanic eruption.

ICAO Doc 9974, *Flight Safety and Volcanic Ash*, is based on work done by the ICAO International Volcanic Ash Task Force, which was established after the eruptions in 2010 of Iceland's Eyjafjallajökul Volcano, which disrupted air traffic in much of Europe.

"The impact on air travel of the Eyjafjallajökul eruption was unprecedented," said ICAO Secretary General Raymond Benjamin. "It forced us to align our guidance material with the latest technological and scientific developments. The new approach, while ensuring the safety of flight operations, provides more flexibility and recommends that the decision to operate a flight in airspace containing volcanic ash rest with airlines, under the supervision of state regulatory authorities."

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New Standards

The European Business Aviation Association (EBAA) says it is developing a set of safety standards for the handling of aircraft in Europe's smaller airports.

The International Standard for Business Aircraft Handling (IS-BAH) will be modeled on the International Business Aviation Council's International Standard for Business Aircraft Operations (IS-BAO), EBAA President Brian Humphries said.

IS-BAH will apply to airports with fewer than 2 million passengers a year that are not subject to the European Union ground handling regulations that apply to larger airports, Humphries said.

"We will conduct our own quality and safety assessments of fixed base operators and ground handling against this standard, enhancing both safety and the customer experience to the benefit of all," he said.

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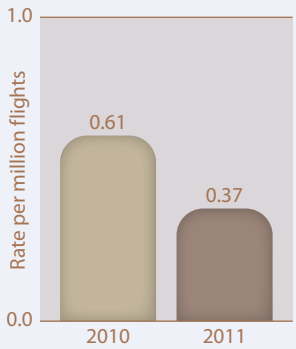
Data Show Accident Rate at New Low

The 2011 accident rate for Western-built jets was the lowest ever recorded, according to data compiled by the International Air Transport Association (IATA).

The data, based on hull losses of Western-built jets, showed a 2011 global accident rate of 0.37 per million flights — the equivalent of one accident every 2.7 million flights, compared with the 2010 rate of 0.61 per million flights — or one accident every 1.6 million flights.

IATA defines a hull loss as an accident in which an aircraft is either destroyed or substantially damaged and not repaired.



"Flying is one of the safest things that a person could do," said IATA Director General and CEO Tony Tyler. "But every accident is one too many, and each fatality is a human tragedy. The ultimate goal of zero accidents keeps everyone involved in aviation focused on building an ever safer industry."

Regionally, accident rates ranged from 0.0 per million flights in Europe and North Asia to 3.27 per million flights in Africa, IATA said.

Missed Deadlines

The U.S. Federal Aviation Administration (FAA) has not met the "timelines" established in a 2010 law calling for the implementation of stricter pilot training standards and higher minimum pilot qualifications, the Department of Transportation's inspector general says.

Testifying before Congress in late March, Inspector General Calvin L. Scovel III said that the FAA also is behind schedule in implementing mentoring programs and "providing enhanced leadership skills to captains." The agency also "faces challenges in establishing a pilot records database," he said.

He noted that the FAA either has complied with or is headed toward compliance with other provisions of the law, including upgrading pilot rest requirements. The FAA announced changes in flight and duty time regulations in January.

Airline Accused of Rest Rule Violations

The U.S. Federal Aviation Administration (FAA) is proposing a $153,000 civil penalty against Colgan Air because of allegations that the airline conducted 17 flights in 2008 and 2009 without scheduling the required minimum rest periods for pilots and flight attendants.

According to the FAA's allegations, "between June 14, 2008, and Feb. 23, 2009, Colgan scheduled flight duty time for two captains, two first officers and six flight attendants on a seventh day, after they had been on duty for the previous six consecutive days."

Under FAA regulations, the airline was required to provide each crewmember with at least 24 consecutive hours of rest during each seven-day period. Of the 10 flight crewmembers, one captain operated four flights without an adequate rest period; the other nine crewmembers worked on one flight each without adequate rest, the FAA said.

Other allegations are that Colgan failed, three times in 2008, to give three flight attendants "a required scheduled rest period of at least eight consecutive hours after scheduling them on flights after their previous duty period" and that a first officer was scheduled for flight time, also in 2008, when his commercial flight time "exceeded eight hours between required rest periods."

Colgan had 30 days to respond to the allegations.

The alleged violations involved FAA flight, duty and rest rules that have been designated to be replaced in December 2013 with new rules intended to fight fatigue by requiring longer rest periods.

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Fatigue was considered a likely factor in the fatal Feb. 12, 2009, crash of a Colgan Bombardier Q400 during approach to Buffalo Niagara (New York, U.S.) International Airport, the U.S. National Transportation Safety Board (NTSB) said, although its final report on the accident also said that investigators could not determine precisely how fatigue might have contributed to the crew's "performance deficiencies."

All 49 people in the airplane and one person on the ground were killed when the airplane struck a house near the airport. The NTSB cited the captain's inappropriate response to a stick-shaker activation as the probable cause.

Helmets for Helicopter Pilots

The Transportation Safety Board of Canada (TSB), citing the May 20, 2011, crash of a Bell 212 on a fire-fighting mission, has reiterated its call for helicopter pilots to wear safety helmets.

The Campbell Helicopters 212 crashed in Slave Lake in Alberta during an approach to the lake to pick up water to be used in fighting a nearby forest fire. The pilot — the only person in the helicopter — was killed in the crash, and the helicopter, which sank in the lake, sustained major damage, the TSB said.

The pilot's death was a result of head injuries that he received in the impact, the TSB said in its final report on the crash. Accident investigators found the pilot's helmet inside its bag in the helicopter cabin, the report said, noting that the operator did not require its pilots to wear helmets and that no regulations require protective headgear.

The report cited research that has found that the risk of fatal head injuries in a crash is as much as six times greater for helicopter pilots and other helicopter occupants who do not wear helmets.

"The lack of regulations or policies requiring helicopter pilots to wear helmets places them at greater risk of incapacitation due to head injuries following a ditching or a crash," the report said.

The TSB noted that Transport Canada also has recommended helmet use by commercial helicopter pilots, as well as student helicopter pilots, and has recommended that helicopter operators encourage their pilots to wear helmets.

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Underutilized Technologies

The technological equipment in today's advanced aircraft is not being fully utilized because air traffic management (ATM) systems have not developed at the same pace, officials from Boeing and the Civil Air Navigation Services Organisation (CANSO) say.

Although today's ATM systems are "highly optimized," the aviation industry must attempt to use existing aircraft capabilities to better manage traffic in congested environments, Neil Planzer, vice president of air traffic management for Boeing Flight Services, and CANSO Chairman Paul Riemens said in a paper presented to the sixth Aviation and Environment Summit in Geneva.

"The capabilities of today's high-technology airplanes are underutilized in the current constrained and outdated ATM system, undermining the profitability of the aviation industry," Planzer said.

"We are fully committed to supporting long-term modernization efforts such as SESAR [the European Aviation Safety Agency's Single European Sky ATM Research initiative] and NextGen [the U.S. Federal Aviation Administration's Next Generation Air Transportation System] without losing sight of improvements we can make today."

Their paper contained recommendations to improve ATM efficiency, including speeding up "real-time decision making through enhanced information sharing" and minimizing restrictions on airspace use that result in inefficient operations.

U.S. National Aeronautics and Space Administration

Changes in Melbourne

Recent changes in Flight Safety Foundation's governing structure have prompted a reorganization of the Australian Advisory Board, co-chaired by John Guselli and Geoff Dell.

Because of the abolition of the regional director's position, the advisory board is now linked to the main U.S. office through Board of Governors member Cameron Ross.

In Other News ...

Projections of a doubling of U.S. airline passenger travel to 1.2 billion passengers by 2032 reinforce the need for continued progress in implementing the U.S. Federal Aviation Administration's **Next Generation Air Transportation System**, Transportation Secretary Ray LaHood says. … Raymond Benjamin has been reappointed to a second term as secretary general of the **International Civil Aviation Organization**. His new term will run through July 2015.

Compiled and edited by Linda Werfelman.