

Source: Flight Global

## Airline safety review

In 2010 there were 26 fatal airline accidents, causing the deaths of 817 passengers and crew. This spans all types of airline operation, including scheduled and non-scheduled passenger flights, jet and turboprop, plus non-passenger operations such as pure freight or positioning, and compares with 2009's figures of 28 accidents causing 749 deaths.

An indication that global average airline safety could still be improved considerably comes from the performance of International Air Transport Association member airlines, whose accident rate fell dramatically last year. The hull-loss accident rate for IATA carriers flying Western-built jets dropped to an all-time low of 0.28 hull losses per million flights, whereas the world average remained fairly static at 0.66. And, of course, that global average rate includes the influence of the IATA carriers' performance, so the opposite ends of the spectrum are wider apart than the two figures imply.

The IATA rate equates to one jet hull loss accident every 3.57 million flights, whereas the world average is one every 1.5 million flights. A comparison with days gone by shows that, in 1979, the world average accident rate in the same category was three fatal accidents per million flights, so the global average has improved by a multiple of 4.5 in that period. That statistical snapshot of the huge improvement over the past three decades helps to put into perspective the unprecedented safety stagnation that is now apparent.

IATA's senior vice-president of safety, operations and infrastructure, Gunther Matschnigg, says the safety programmes IATA has been embedding over the past decade are beginning to bear fruit. The single biggest influence, Matschnigg believes, is the IATA Operational Safety Audit (IOSA) programme, which has been introduced gradually over the past five years and has become compulsory every two years for member carriers. If a member airline fails or refuses to undergo an IOSA, it loses its membership. Now the IOSA is embedded, it is continually being enhanced, says Matschnigg. This year it includes a verification of the effectiveness of carriers' safety management systems.





Meanwhile, safety programmes based on information derived from an increasingly effective worldwide system of data sharing and flight operations data monitoring are also having an effect on performance, Matschnigg says, with the International Civil Aviation Organisation getting more and more involved in spreading the message.

The difference between airlines from countries whose carriers still have 1980s accident rates and those with 21st century performance is, arguably, split between those who have embraced the major cultural change in safety that has taken place between then and now. In simple terms, that change is a shift from reactive to proactive safety management, a move away from using safety regulations to try to enforce good practice and towards a recognition that regulations define a minimum legal standard, not a desirable one.

If the improvement trend is to resume, industry consensus is that it can happen only when all nations, particularly those with immature or developing economies, embrace modern safety management methods rather than hoping that regulation will enforce standards. Presenting on pilot standards at the Flight Safety Foundation (FSF) International Aviation Safety Seminar in October 2010, the Air Line Pilots Association International's chief human factors spokesman Capt Charles Hogeman summed up the limitations of regulation to enforce safety thus: "Simple, clear purpose and principles give rise to complex, intelligent behaviour. Complex rules and regulations give rise to simple, stupid behaviour."