

An Australian Senate committee will shortly report following an investigation into the country's pilot training and airline safety, amid concerns of falling standards. Emma Kelly looks at the issues.



Spotlight on training

AAPA

In late September 2010, the Australian Senate opened up a can of worms when it directed the Senate Standing Committees on Rural Affairs and Transport to investigate and report on the country's pilot training and airline safety. The investigation was launched in response to growing concerns that standards of training and safety in the country were falling, with events involving Jetstar and Tiger Airways raising questions about incident reporting.

What was meant to be a two-month investigation has turned into nearly eight months, which has included public hearings and almost 50 written responses from the country's pilots, airlines, aviation associations, training providers, universities, airports and interested parties. The committee is now scheduled to report its findings in May after a second reporting extension.

Top of the agenda for the committee was the investigation of pilot experience requirements

and the consequence of any reduction in flight-hour requirements on safety. Coupled with that, it was tasked with looking at the United States Federal Aviation Administration's Extension Act of 2010, which calls for a minimum of 1,500 flight hours before a pilot is able to operate on regular public transport (RPT) services, and whether a similar mandatory requirement should be applied in Australia. Current industry practices to recruit pilots, including pay-for-training schemes and the impact these might have on safety, as well as the retention of experienced pilots and the type-rating and recurrent training for pilots have also been investigated.

REGULATOR CAPACITY

The country's regulator also came under the spotlight, with the committee asking whether the Civil Aviation Safety Authority (CASA) had the capacity to oversee and update safety regulations in light of the ongoing and rapid

development of new technologies and skills shortages in the industry.

Safety reporting issues were a major focus of the inquiry, including investigating the need to provide legislative immunity to pilots and other flight crew who report on safety matters and whether US and European approaches would be appropriate for Australia. Also examined were the reporting of incidents to aviation authorities and the handling of those reports by the authorities.

In particular, the committee was interested in two incidents, one involving a Jetstar aborted landing at Melbourne Airport in June 2007 and the other on a Tiger Airways flight to Melbourne in May 2009, when the aircraft was forced to divert due to problems with the aileron control system which had previously been encountered. In both incidents, the airlines failed to comply with incident reporting requirements. As a result, the committee also investigated

how reporting processes can be strengthened with the aim of improving safety and training.

At the launch of the inquiry in September, the move was publicly welcomed by the country's airlines and pilot bodies. The Australian and International Pilots Association (AIPA) had been concerned for some time about what it perceived to be slipping standards. "In recent years, we have seen a number of serious incidents, such as the Jetstar flight that came within metres of the runway in heavy fog in Melbourne in 2007 and Tiger Airways' mid-air incident last year that forced the plane to land but wasn't reported to the authorities," says AIPA president Capt Barry Jackson.

AIPA made sure it had its say in the inquiry, submitting a detailed response as well as appearing at the hearings. On the issue of pilot experience requirements and the consequence of any reduction in flight-hour requirements, the association is worried that current developments pose a significant risk: "AIPA is concerned that the widespread shift in emphasis in airline pilot recruiting from those pilots who have several thousand hours of flight experience in general aviation to cadet pilots whose only experience is in a training school environment has and will continue to increase the risk of an aviation accident."

As a result, AIPA recommends CASA undertakes a comprehensive review of the minimum experience requirements for Australian pilots on RPT operations, with the aim of producing "a compulsory pilot experience and safety management plan", which would see pilots with less experience having their skills



AIPA's latest batch of graduates alongside their instructors.

assessed more frequently than experienced flight crew.

Individual pilots who responded to the inquiry share concerns of declining standards, including Geoff Klouth, an Airbus A320 training captain with Jetstar, who has been flying since the early 1980s. A former Ansett and Qantas pilot, as well as a former senior transport safety investigator with the Australian Transport Safety Bureau (ATSB), Klouth concluded from his involvement in investigating incidents that "the standard of operation was not as high as when I was flying".

■ ADVOCATING COMPETENCE

Not surprisingly, many operators do not agree with AIPA's view, with the Qantas Group (representing Qantas, Jetstar and QantasLink), Tiger Airways, Regional Express (Rex) and Virgin Blue believing that competency-based training is the way to go. Carriers point out that the traditional route to a flying career via the military or GA, whereby pilots had a higher number of flight hours than today, no longer produces the number of pilots required by the industry and does not necessarily produce the right type of airline pilot.

In its submission, Tiger Airways says, "There is a recognition that high-quality training has a more important part to play in delivering piloting skill than does simple experience based on flying hours." Although today's training courses have seen a reduction in flying hours, modern flight simulators have been introduced which allow the trainee to practise emergency procedures that could not be conducted in the air, says the airline's director of operations, Capt Tim Berry. "The quality of the training is the best determinant of the 'safety' of the pilot, and these modern training systems provide the best means of securing aviation safety for the future," declares Tiger.

The Qantas Group agrees. "There is considerable international evidence and practice to suggest that competency-based training as an approach delivers better safety outcomes than focusing on quantitative training measures," the company stresses.

In its brief submission – just two pages, compared with Qantas's 20-plus pages – Virgin Blue says, "Pilot performance does not directly correlate with pilot experience. We would regard rigorous selection, the quality of training and pilot performance as a more important focus in delivering better safety outcomes."

Rex, which in 2007 started its own cadet programme to meet its pilot needs after losing large numbers of its flight crew to the larger carriers as they expanded, likewise does not equate a reduction in flying hours with a decrease in safety. "Experience has shown that the standard and type of training is far more important than hours in a log book," it believes.

When it launched its cadet programme, Rex envisaged that normal recruitment channels would be supplemented by the cadet pilots, but it has found the standard of cadets so high →



PILOT TRAINING



Training in the Piper Warrior at Rex's training school – AAPA – can lead to a right-hand seat ...

that it now intends to recruit virtually all of its pilots from its cadet scheme and supplement them with direct-entry pilots. Rex cadets enter service with, on average, 200 hours of aircraft and simulator time, but follow a comprehensive system of assessment. There is little difference – less than 3% in the first year – in the competence level achieved by Rex cadets compared to direct-entry first officers with at least 1,500 hours of experience, says the airline. “With some cadets now entering their third year with Rex, it is perceived that, in general, this trend will continue, with the cadets eventually achieving higher levels of competence than the direct-entry pilots. This is because they are trained as airline pilots from day one.”

As a result, the airlines do not support any move in Australia towards requiring a minimum of 1,500 flight hours before a pilot is able to fly RPT services. In fact, Rex is “adamantly opposed” to such a move, believing it would have “catastrophic commercial and safety implications for the industry, and in particular the smaller operators”, with the supply of pilots likely to dry up. “Quite simply, the industry in Australia is no longer capable of supplying the airlines with enough pilots that have over 1,500 hours,” says Rex, advocating the focus should be on the quality of training.

Tiger agrees, noting in its evidence, “In the short to medium term, imposing the 1,500-hour limit is likely to create a pilot shortage, and Australian airlines will be forced to look outside the country to satisfy their pilot needs.”

The carriers also point out that both pilots involved in the Colgan Air Bombardier Q400 crash, which prompted the US FAA 1,500-hour proposal in the first place, had more than 1,500 hours of flying experience.

While AIPA questions the 1,500-hour figure, it says the minimum number of hours must be a balance between skills, knowledge and behaviour versus risk. It believes minimum licence and experience requirements should be determined for each crewmember in low- and high-capacity RPT and that the experience requirements should be reviewed so that sufficient weight is placed on multi-engine experience.

■ TERMS AND CONDITIONS

Airline recruitment practices have proved to be a contentious issue in the inquiry. AIPA is “stridently opposed to current recruiting models” and says that cost pressures brought about by the low-fare airline model have resulted in carriers offering terms and conditions that are unattractive to experienced pilots. The association describes pay-for-training and pay-to-fly schemes as “inherently industry damaging and risk exacerbating”.

AIPA supports Rex's cadet scheme – which guarantees employment for the graduates and provides significant financial incentives for trainees to achieve high standards – but is opposed to “other so-called cadet schemes”, such as Jetstar's, which it sees as being “more motivated by financial engineering than a

balanced response to a supply shortage”. AIPA recommends that operators are no longer permitted to charge employees for post-graduate training programmes to fly specific aircraft types and that the government examines incentives to reinvigorate the pool of potential pilots.

Rex does not see pay-for-training schemes as being flawed as long as appropriate training standards are enforced. “Common sense tells us that the origin of the funding is irrelevant to the quality of the training and to the quality of the graduating pilot,” the airline argues.

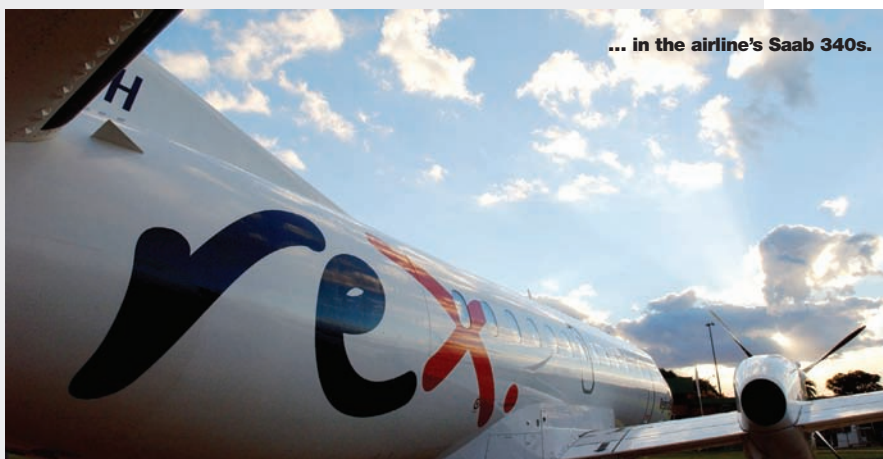
The Qantas Group concurs, commenting, “There is no evidence of a connection between the manner in which a training programme is funded and the skill level or safety of a pilot.”

The retention of experienced pilots is a major concern for regional airlines and presents one of the greatest challenges to maintaining a safe and stable operation, according to Rex. During financial year 2008, for example, when the demand for pilots increased dramatically, Rex lost 50% of its pilots in 12 months to bigger carriers. The only ways to prevent this, Rex believes, are national legislation that requires the payment of a transfer fee, which is in operation in China, and a cadet scheme whereby the airline funds the training in return for the cadet agreeing to stay for a minimum period.

Other carriers have been impacted less severely by this issue, with Virgin Blue, for example, having an annual turnover of less than 1% and Qantas 1.1%.

While airlines see current type-rating and recurrent training as adequate, AIPA believes regulatory requirements are inadequate. It recommends that CASA review the knowledge, specified behavioural objectives and skills required for type-rating and recurrent training programmes. The focus should be on the skill set necessary for a pilot of a modern complex aircraft, says AIPA.

On the issue of CASA and its ability to update and oversee safety regulations, AIPA says current rules lag industry developments significantly and recommends a further review with industry. It also recommends that the government funds CASA personnel to ensure



... in the airline's Saab 340s.



they are current with technologies, the development by CASA of internal professional development programmes, and a scheme whereby personnel are seconded to CASA from industry to ensure currency and expertise.

Airlines believe that CASA must work in partnership with industry to develop workable regulations for the introduction of new technology – with Qantas pointing to its introduction of the Airbus A380 and required navigation performance as examples of where this collaborative approach has worked well.

The issue of safety reporting and, particularly, legislative immunity has raised considerable debate in the inquiry. AIPA does not believe the current aviation safety reporting legislation is adequate and recommends extending legislative and employment immunity to pilots

who report legitimate safety matters. It believes the UK and US models of legislative immunity should be examined in order to extract the best elements.

■ JUST CULTURE

AIPA also recommends that “existing provisions for mandatory reporting are strengthened with outcomes obligations to supplement existing prescriptions”, and that CASA considers adopting a more formal approach to “Just Culture” – which allows for free and non-punitive reporting of safety events. The association fully supports the intent of the Transport Safety Investigation Amendment (Incidents Reports) Bill 2010, which seeks to prevent interference with incident reports. It recommends that the bill is adopted by parliament, that safety management system

data is accorded appropriate legal protection, and that a safety action programme, along the lines of the US FAA’s Aviation Safety Action Program, is explored.

Airlines, however, are in support of maintaining a Just Culture whereby reporting and sharing of information is encouraged and remedial action is undertaken when deficiencies are found. “A Just Culture promotes an atmosphere of openness and voluntary sharing of information, where staff feel comfortable to admit to mistakes without fear of reprisal,” remarks Qantas. “This approach is critical to ensuring prompt and accurate reporting of safety information.”

Qantas believes the current regulatory framework concerning reporting requirements is “robust, effective and consistent with →

international best practice". It is concerned with some elements of the amendment bill, believing that it may have "unintended negative consequences on safety reporting".

Rex says that to provide legislative immunity is "against principles of justice and that the system of Just Culture must hold for reporting in any safety management system". It thinks the free reporting of safety incidents is an essential part of any safety system which must be encouraged, while legislative immunity would compromise the principles of Just Culture.

Virgin Blue believes that legislative immunity would not enhance safety and warns against "onerous requirements which have the potential to give rise to 'reporting fatigue' which may ultimately discourage pilots from reporting matters".

With regards to the Jetstar and Tiger safety incidents highlighted by the Senate, AIPA contends that these two events are "only the tip of the iceberg of unreported events across the industry". In its defence, Tiger Airways points out that the ATSB concluded that the incident was a "minor safety issue". The airline recalls, "It was the judgment of the individuals involved in this event that this matter was non-reportable to the ATSB. Tiger Airways absolutely refutes any suggestion that there was any attempt by the airline to hide this matter."

■ COMMUNICATION BREAKDOWN

In the Jetstar incident, an internal investigation by the carrier revealed additional information to that which had previously been provided to the ATSB, but it failed to pass this on to the bureau.

Jetstar was criticised by the ATSB for this failure, although it was not found to be a deliberate act. The Qantas Group points out that the internal investigation led to an internal review of missed approach procedures to improve their effectiveness.

The ATSB says it has no evidence to support the view that there is a systemic problem in the industry with regard to accident and incident reporting, and it believes that the amendment which proposes blanket immunity to aviation professionals who report accidents and incidents poses a danger to safety, preventing appropriate safety action from being taken.

Not surprisingly, the local airline industry is waiting with interest to see what conclusions the Senate committee comes to after eight months of deliberations. ■