Guild of Air Pilot and Air Navigators

Senate Submission

The Guild of Air Pilot and Air Navigators is pleased to submit the following to the Senate Rural Affairs and Transport References Committee Inquiry into Pilot Training and Airline safety. As a non-political, non-aligned body the Guild is, by its own constitution, forbidden from engaging in any form of trade union activity, and does not seek to operate as lobby or pressure group.

The Guild is however concerned with every technical and safety aspect of aviation and is committed to help set and maintain standards for all those who fly or rely on aviation for their livelihood. As qualified pilots or navigators the diverse membership of the Guild is well placed to provide an input to this important Senate Inquiry.

Submission Summary

Whilst not in support of the leading premise reflected in the terms of reference of the inquiry (that increasing the required flying hours will suffice to improve aviation safety) the Guild is fully supportive of any moves to implement a full and open inquiry into the state, and safety, of aviation in Australia, provided such inquiry is fully independent and able to investigate all aspects of aviation including (but not limited to):

- Training (at all levels);
- Funding;
- Regulation;
- Reporting (including protection of the reporter); and
- Licensing requirements.

The Guild is not supportive of any change to qualifications or experience based on the actions of other nations, particularly where those changes are not supported by any reliable data. Change based on valid and reliable data/research is fully supported where the change can be shown to improve safety. Aviation is the safest form of transport but is not without risk. Change itself is acknowledged as a source of risk and as such, change that does not contribute to safety and that has not been subject to a clear and unambiguous safety analysis should not even be contemplated.

Formal Submission

a. pilot experience requirements and the consequence of any reduction in flight hour requirements on safety;

This encompasses many of the concerns directed at the Multi-crew Pilot Licence (MPL), and which would now appear to be directed at the recently announced Jetstar Cadet Scheme. But what exactly is meant by "experience" – interestingly speakers generally mean that the holder of an MPL will not have the same level of 'experience' as the holder of a Commercial Pilot Licence (CPL) and will therefore be less safe. An intriguing view as the missing experience is never well defined. If the speaker means the MPL will not have the 70 hours of command time required for the issue of a CPL they are, of course, quite correct. The question which then needs to be asked is – of what value to the CPL holder operating multi-crew in a turbine powered multi-engined aircraft are the 70 single pilot hours they acquired in gaining their licence? Particularly as the hours are typically gained in a single engine, piston powered aircraft.

Replacing 70 single pilot hours with a commensurate number of operationally specific simulator hours conducted multi-crew, using the target airline's operating procedures is arguably the most task specific move the industry has made for a number of years and should be welcomed rather than decried or condemned. As the CPL morphed into the task/operation oriented licence we have today, there will have been many who saw the change as the end of the 'real pilot', for no other reason than it was different to the way they had been trained – even though it addressed all the same skills. The same can be said for the MPL – it is not a CPL and is not intended to be. The MPL is a made for purpose licence designed to deliver a product which is trained and equipped to meet the challenges identified as being relevant to the working environment without the need for un-training or additional training.

We would do well to remember that ICAO through a number of highly qualified and experienced Working Groups formed under the auspices of the Flight Crew Licensing & Training Panel spent from 2001 – 2005 researching and developing the parameters of the MPL. There were two key aspects to the deliberations, and thus recommendations, of the Working Groups – simulation and competency.

The Working Groups noted that:

- Simulation is currently in widespread use in all phases of training.
- The advantages, capabilities and limitations are well understood.
- Learning transfer will be similar to that experienced in other traditional flight crew training.
- Using simulation will:
    - enable realistic threat and error management training;
    - reduce training accident risks; and
    - provide for wider scope in training exercises.

They also noted:

- Competency-based standards define much better the competencies of pilots at all levels and will improve standardization worldwide.
- International recognition of the benefits of competency based training over prescriptive time-based historical training practices.

It is worth noting that Australia was recognised, by ICAO, as a leading practitioner of competency based training (CBT) in flight training.

Reducing pilot experience requirements with no compensatory action would result in a reduction in safety. However, the ICAO Working Groups were convinced that reducing pilot experience

requirements with the introduction of stringent competency requirements and clearly focused use of simulation would not result in a reduction of safety, and could be expected to contribute safer operations.

b. the United States of America's Federal Aviation Administration Extension Act of 2010, which requires a minimum of 1500 flight hours before a pilot is able to operate on regular public transport services and whether a similar mandatory requirement should be applied in Australia;

There are aspects of FAA Regulations the adoption of which may benefit Australia – the requirement for 1500 flight hours is not one of them.

There is no evidence that a pilot with 1500 flight hours is any more "safe" than one with 1000 or 750, or even with the Australian aviation insurance standard 500 hours (the "magic" figure which CPL holders must reach before most insurers will cover an operator who uses them to fly a twin engined aircraft). Of course experience is beneficial, provided that it is in context – the "magic" 500 hour mark for twin approval is generally achieved operating a single engine aircraft in the same environment in which the pilot will operate the twin. Accordingly, the "experience" has at least environmental and context relevance, and may well contribute to better piloting and thus safety. However, acquiring 1500 hours through unsupervised Cessna C152 or C172 flying "in the bush" is highly unlikely to contribute in any way to a safer airline operation.

We have only to look at international airlines and our own military to see the benefits of quality training:

- the RAAF has been placing well trained low time pilots on the flight deck of airliner – equivalent type aircraft for decades, and they typically gain command in less than 3 years (generally about the time that many of them achieve 1500 hours).
- British Airways (and BOAC & BEA prior), Lufthansa, DragonAir, South African Airways and even Qantas have put very low time, well trained, cadets directly on the flight deck of large jet airliners for decades without adverse results.

Furthermore, the findings of ICAO's MPL Working Groups provide strong evidence of the value of competency over any arbitrary hours of experience requirement. Indeed there is a clear lack of evidence to support the move by the US towards an hour minimum, whereas there is evidence that better training will provide a positive safety outcome. Both aspects have been recognised by the US but, for reasons known only to the 111th Congress, were ignored in the formulation of the "Airline Safety and Federal Aviation Administration Extension Act of 2010".

In short, hours should never be used in place of competence. The focus should be on the quality of the training not on an arbitrary hours figure for which there is no basis other than a law change in the US that was made as a result of heavy lobbying by an emotionally fuelled focus group.

Finally, care must be taken to ensure that the debate is not hijacked by those seeking better remuneration, or the protection of their own position. The debate and the outcome must focus on safety and be based on science and hard data, not emotion.

c. current industry practices to recruit pilots, including pay-for-training schemes and the impact such schemes may have on safety;

There are so many levels to this that the greatest issue is determining a start point.

"Major" airlines generally recruit pilots on the premise that they (the pilot) or someone else (a charter or regional airline operator or the like) will have paid for, and been responsible for, getting the pilot to the level of knowledge and experience the airline considers "suitable". That "major" airlines set high

knowledge and experience requirements is in part due to the fact that they (the "major" airline) had no involvement, or indeed interest, in the nature or quality of the training or experience the recruit has received or gained. This view is supported by the simple fact that when the "major" is involved with the training, and thus has control over the nature and quality, as is the case with cadet programs, the experience requirement is much lower - typically >2,000 hours in the first instance but little more than 250 hours in the latter.

The impact on safety is commensurate with the quality of the training.

Where the individual is required to pay for themselves the focus is on the dollar return not on the quality of the training being provided. Self funded trainees will gravitate towards the lower priced training operator. Compounding the situation, the self funded trainee is unlikely to be financially capable of flying on a regular basis and thus receives sporadic training with reduced quality and an overall increase in cost.

Additionally, self funding becomes a selection gate – those able to pay train, not necessarily those best suited to train.

In short – self funded training has negative impact on safety as the focus of the training is not on quality but on quantity. The saving grace for Australia is that we continue to use competency as the key to progression in flight training.

d. retention of experienced pilots;

The retention of experienced pilots is simply a workplace resource issue, and thus one easily managed by responsible companies. Most pilots wish to remain in their current employ for a few basic reasons:

- they enjoy the culture of the workplace;
- the base of operations suits their life style;
- they are not motivated to apply for another job;
- the remuneration/benefits are satisfactory; or
- they cannot get a better job elsewhere.

With competitive remuneration/benefits the stay/go decision is made on other criteria, always keeping in mind that you cannot force pilots to stay with their employer against their desires.
For all that the situation for regional and flight training operators will always be more difficult given the narrow margins and thus the limitations on providing competitive remuneration/benefits.

e. type rating and recurrent training for pilots;

The Australian regulations currently not only have a lower standard for First Officers, but do not require the same level of qualification. Apart from the "Cruise Support pilot" (i.e.: second officer) concept, there is no longer a place in RPT for the co-pilot type endorsement, or co-pilot instrument rating. Every pilot in the cockpit should be fully endorsed and current on all the instrument procedures the aircraft is going to be using, and all pilots engaged in RPT operations should do the same recurrent training and have the same recency for instrument flying and proficiency checks.
Proper qualifications, training, and recency are more important than hours, or even the level of the licence.

Many airlines now require all pilots to be at P1 standard. In the interests of safety to do less cannot be justified, even as a cost saving exercise.

f. the capacity of the Civil Aviation Safety Authority to appropriately oversee and update safety regulations given the ongoing and rapid development of new technologies and skills shortages in the aviation sector;

An effective aviation regulator depends on three things only - good regulations, proper leadership and organisational culture.
Sound, relevant, flexible, yet consistent regulations, that can be clearly understood by all, do not exist anywhere in the world. The US regulations are as bad as ours, but the FAA is better organised and possessed of a culture that assists the industry to improve.
The willingness by a nation to properly supervise the application of their regulations is vital to the safety of their operators. Whilst system based approaches are a very good way of establishing sound and safe practices within an operator there remains the need for the regulator to conduct targeted and timely surveillance and audits. Whenever, and wherever, a regulator has tried to avoid the need for surveillance and audit there have been undesirable results. However, to achieve and maintain the necessary level of inspection and oversight the aviation authority must have the full support of the government of the day.

Oversight

CASA's stated policy is that the focus for surveillance will be on the upper end of the industry – the carriers of fare paying passengers. Whilst there is nothing inherently wrong with such a policy the concentration of resources at the high end has lead to a reduced focus on the lower, or entry, end of the industry. Flight training operators are no longer subjected to the levels of surveillance and audit experienced in the past. There is no direct evidence to support the view that the reduction in focus, by the regulator, on the training sector has been a contributing factor to the perceived "drop" in standards and the overall quality of flight training, but it would be a bold commentator who held that there was no connection.

The link between training and performance has been long established, and there are numerous incidents/accidents where the outcome has been very clearly predicated on the training of the pilot(s) involved – the Hudson River being a recent and well publicised example.

Update/Reform

There is some conjecture as to whether the current CASA Regulatory Reform Program has been ongoing for >10 or >20 years. In either case, the capacity for CASA to oversee change in a rapidly developing industry must be questioned. Successive Directors/CEOs of CASA have assured industry (and the Parliament) that various Regulations will be introduced within (*enter optimistic time frame*), and without exception the timeline has been compromised.

The Regulations central to this inquiry (Part 61 Flight crew licensing, Part 91 General operating and flight rules, Part 119 Air operator certification, management and systems, Part 121 Passenger Transport Services and Cargo Operations - Larger Aeroplanes, Part 141 Flight training operators, Part 142 Training and checking operators) are all shown on the CASA website as "under development". Until these are in operation CASA will continue to operate in a catch up mode patching old, and outdated, Regulations in an endeavour to keep pace with industry.

Outcome

There is a need for CASA to increase the focus on training. Existing policies and practices, whilst appearing to be worthwhile, are not delivering what is needed. The Flight Training and Testing Office (FTTO) for example was expected to provide the industry with, at the very least a source of valid, test based information which would enable an improvement in training. However, to date this has not been the case. Certainly the change in testing procedures has been beneficial – but there has

been no general feedback to the training sector other than that provided to the specific operator involved, this is not the way to raise the standards of the training sector.

The training sector of the industry is ready and willing to change – but needs direction and the support of regulation. The FTTO should be at the leading edge of training development and reform, but this is simply not the case. Aviation continues to train using a syllabus that has not been formally reviewed in over 40 years – as a small example, the opportunity to incorporate the benefits of simulation into flight training is severely limited by the constraints of the syllabus and the miniscule number of simulator hours which are 'loggable'. The absence of "upset training" is a further example. A review of the syllabus was considered in 2004/5 but not undertaken due to the imminent release of Part 61. Clearly the need has not passed and neither has Part 61 been released.

If the intent of this inquiry is truly to improve safety in aviation then the focus should be on training:

- what is required to be addressed by training;
- how that training is delivered;
- the level and nature of surveillance and auditing to which training delivery is subjected; and
- how the training outcome is tested.

Generally referred to as a "training needs analysis".

To do otherwise and just "tack" another change on without due diligence will be to perpetuate the view that aviation is just not that important.

g. the need to provide legislative immunity to pilots and other flight crew who report on safety matters and whether the United States and European approaches would be appropriate in the Australian aviation environment;

While we all believe in the principle of the "System Accident", there have been cases where the crew's poor performance has been protected by this approach. Everyone will agree that all aviation staff should be able to report any issue, including their own mistakes, without the fear of being persecuted, or prosecuted. The inevitable problem is that this may protect the person who commits an act that is deliberately negligent and malicious, as long as we can blame "the System". From a practical point of view, writing laws to adequately cover all the possibilities in this area is almost impossible and may well be counterproductive. A quick look at some of the extant "whistleblower protection" legislation, or the lack thereof may be useful.

h. reporting of incidents to aviation authorities by pilots, crew and operators and the handling of those reports by the authorities, including the following incidents:

(i) the Jetstar incident at Melbourne airport on 21 June 2007, and

(ii) the Tiger Airways incident, en route from Mackay to Melbourne, on 18 May 2009;

In the past, an ASIR submitted by a pilot was guaranteed a direct path to BASI/ATSB. The advent, in recent years, of large safety departments has seen many reports being subjected to review before submission and in some cases not even being forwarded. The "Company" reason may well have been "This does not meet the criteria for an ASIR" however this is in fact censorship and should not be countenanced.

i. how reporting processes can be strengthened to improve safety and related training, including consideration of the Transport Safety Investigation Amendment (Incident Reports) Bill 2010; and

The changes proposed by this Bill are welcome and would seem to cover off the reporting process. The extant reporting process is robust, efficient and is serving the industry well. Use of the outcomes

of reporting and subsequent investigation could do with improvement. An option would be to charge ATSB with the task of educating/informing the industry based on their investigations and subsequent findings. This would also enable ATSB to use the process to promote the benefits of reporting.

j. any other related matters.

The issues raised by this Senate Inquiry highlight the need for a comprehensive review of all aspects of the aviation industry. However, as such a wide ranging approach is unlikely to garner sufficient support a review of the key aspects of the industry – training and safety – would be the very least that could be expected. Reviews of the industry have traditionally been conducted/controlled by the regulator, however in this case any review should be chaired by an independent person with aviation experience.

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