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Ms Jeanette Radcliffe
Committee Secretary
Senate Rural Affairs and Transport References Committee
PO Box 6100
Parliament House
Canberra ACT 2600

Tuesday, 26 October 2010

Dear Ms Radcliffe

Inquiry into pilot training and airline safety

Cobham Aviation Services Australia welcomes the opportunity to make the following submission to the Senate Standing Committee on Rural Affairs and Transport inquiry into Pilot Training and Airline Safety.

Cobham Aviation Services Australia is a specialist contract aviation supplier which operates more than 40 aircraft and employs more than 1,100 people. Cobham's diverse operations include aerial surveillance on behalf of the Australian Government, hydrographic survey on behalf of the Royal Australian Navy, high capacity regular passenger transport services on behalf of Qantas, high capacity charter services on behalf of a number of high profile mining companies and high capacity freight on behalf of Australian air Express. Cobham operate BAe146 and Boeing 717 jet aircraft and DHC-8 turboprop aircraft.

I would be pleased to have my senior pilot executives provide any further information if it would be of assistance and to appear at Committee hearings if invited to do so.

Yours sincerely



Peter Nottage
Chief Executive Officer
Cobham Aviation Services Australia

(a) Pilot experience requirements and the consequence of any reduction in flight hour requirements on safety;

"Experience should not be confused with competence"

There is a popular misconception that a pilot who has accumulated a large number of flying hours is a good pilot. A good pilot is made by good training and self-discipline and is supported by operators who believe in safety, Standard Operating Procedure adherence and in a healthy and supportive check and training regime.

- i. There have been no significant recent legislative changes to pilot experience requirements.
- ii. In many instances pilot experience requirements are varied by the operators in response to supply and demand of pilots.
- iii. A responsible operator should train to a level of competence regardless of the level of experience of the pilot. This is Cobham's approach.
- iv. Pilots recruited by Cobham, prior to being checked to line, are required to meet the set line standard. Candidates who are not able to meet the set standard, irrespective of their experience, will not continue to be employed.
- v. Cobham has, on occasion, increased initial training when the experience and performance of the candidates is assessed as requiring it, in order to meet the set line standard.
- vi. Many high profile international airlines recruit and train their own cadets and are able to safely promote them through their organisations at the same rate as General Aviation trained pilots.

(b) The United States of America's Federal Aviation Administration Extension Act of 2010 which requires a minimum of 1 500 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;

"This legislation will likely reduce the pool of qualified pilots and have no positive impact on safety"

If the FAA goes with a straight minimum, and does not allow credit for focussed training/tertiary aviation qualification/approved mentoring programmes etc., a large number of skilled and well qualified pilots will not be eligible to operate RPT aircraft. Instead, operators will be compelled to look to a population that may well include pilots who have not been exposed to as high a quality of training and may not have been well mentored in their subsequent General Aviation experience.

- i. Quality of experience is extremely variable. The experience gained by a pilot conducting VFR charter by day in a light single engine aeroplane, essentially unsupervised, is likely to be of significantly less worth in a multi crew RPT operation than a specifically trained first officer who, by virtue of the two crew environment, is essentially continuously supervised.
- ii. A pilot in command of a charter or RPT aircraft over 5700kg MTOW is required to hold an ATPL. The minimum total hour requirement for an ATPL is 1500 hours.
- iii. In practice most multi crew Captains have significantly more experience than this – in our operation 3000 to 5000 hours is typical.
- iv. The first officer is regarded by most operators as being a Captain in training and therefore would not and should not be required to have the same experience as a Captain.
- v. So, while it might be argued that the minimum experience for a traditionally trained first officer should be 1500 hours, we have been able to find no evidence

to suggest that a specifically trained cadet with less experience is any less safe. To the contrary we have recruited, trained and have in our employ some first officers with less than 1500 hours who we consider very high quality, excellent pilots.

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

"It is the standard of the training that is critical, not who pays for it"

The traditional Australian model of an aviation career starts either with the military or with a hopeful student pilot funding his own training, to the tune of \$60,000 to \$100,000. The newly graduated pilot then either sets out for remote Australia hoping to obtain a job doing scenic flights or charters to remote communities, or spends more money to obtain an instructor rating. The pilot with the best ability to talk his way into a job, not the most skilled pilot, is likely to be most successful at this point. He then spends the next two to three years working for very low wages, often on a casual basis, often competing with other pilots for work, until he reaches a level of experience that is deemed appropriate, given the market conditions, to make him attractive to the airlines. This model does create self-reliant and resourceful pilots. However, some of the attitudes and skills gained in the General Aviation environment do not translate well into a RPT operation.

A pilot who follows a structured course of training with the end aim of operating a RPT aircraft in a very disciplined and structured environment may not gain the hard bitten skills of a General Aviation trained and experienced pilot. However, he is more likely to retain the disciplined approach and due regard for procedure, than his General Aviation counterpart.

A structured course of training, paid for by the pilot or operator and ostensibly leading to an airline position, can therefore, produce pilots that are of at least equivalent standard and safety as those brought up in the traditional General Aviation model, even if they have less hours experience, provided that the operator applies a minimum standard of proficiency when accepting them into the operation.

- i. All civilian pilots pay for their own initial training. Unlike many other professional qualifications, pilot training has only recently become eligible for HECS and then only under specific circumstances.
- ii. Operators will only attract candidates to self-fund their training by virtue of the attractiveness of the job that they subsequently offer. This training occurs prior to commencement of flying for the employer, with training normally provided by a third party. The pilot is still required to pass a proficiency check, funded by the operator and conducted by a pilot of the operator, who is approved by CASA before any flying for the operator, is undertaken. This controls the standards and safety of pilots entering an organisation.
- iii. In Cobham's experience, more commonly, operators will pay for a pilot's endorsement training having agreed with the pilot that he will pay back a pro rata proportion of the cost of the endorsement if he does not return a minimum period of service (return-of-service bond). This is not an uncommon practice in other industries and is a fair way to ensure the operator gains some return for many tens of thousands of dollars training expenditure. Operators still select the best candidates available and so, in the case of bonding arrangements, there is no effect on the quality of the candidate and therefore on flight safety.
- iv. Because of their position as one of the most desirable employers in the industry, larger airlines can require new hire pilots to pay for their training on a specific

aircraft type. There is no logical argument that would hold up to scrutiny that suggests this approach would change the standard of these pilots against the standard of a pilot fully trained and paid for by the operator.

- v. Arguably, requiring pilots to self-fund their endorsement training improves the standard within an operation. It removes the temptation for the operator to persist with pilots who demonstrate a marginal standard only because the operator has already invested so much money in them.
- vi. Self-funded endorsement training is extremely unpopular among the pilot community because it represents a significant outlay, but this does not make it unsafe.

(d) Retention of experienced pilots

"An ability to retain experienced pilots in the long term is a luxury available only to the major airlines"

Pilots generally have ambitions to work for the major airlines. In order to attain that ambition most pilots will move from one job to another in order to position themselves best for the airline job. This generally means that lower order operators can expect to turn over pilots in line with market demand. However operator's attitudes to safety, organisational culture, security of employment and nature and intensity of operation can have a large impact on pilot retention. Each operator has an ability and obligation to foster the right employee environment to maximise retention.

- i. The ability of an operator to retain pilots depends upon many things:
 - Remuneration
 - Location and time away from home
 - Lifestyle, including flying rosters and stability
 - Prestige in the aircraft they fly or type of operation
 - The availability of "better" jobs.
- ii. Pilot jobs with large airlines are generally the best paid, located in capital cities and have other benefits to make them attractive. When plenty of these jobs are available, for example through 2007/08 with the rapid expansion of low cost carriers in Australia, it is very difficult for other operators to retain their most experienced pilots.
- iii. Aviation is a global industry. Australian pilots are well regarded and work all around the world. Therefore, whoever is offering the best deal is likely to attract the most experienced Australian pilots.
- iv. One of the biggest challenges for lower order operators is in retaining training and checking staff. These pilots are necessarily the most highly qualified within an operator's organisation and represent a significant investment on the part of the operator. They are, however, also the most attractive potential employees for the airlines.
- v. Cobham has trialled a number of retention schemes including career development, location and longevity bonuses, fly in-fly out and incremental pay increases for years of service. It has been difficult to assess the success of these schemes given the recent volatile state of the industry.

(e) Type rating and recurrent training for pilots

"Industry practices significantly exceed CASA requirements"

CASA requirements for type training on large aircraft lag significantly behind industry best practice and do not recognise significant steps forward in training technology e.g. simulator, CBT etc.

- i. The current CASA requirements for a command endorsement on a large aircraft are minimal. The minimum hour requirement for the endorsement training is 5 hours.
- ii. While most operators allow significantly more than this, there is some scope for less scrupulous operators to meet the bare requirement of the regulation without ensuring that training is thorough.
- iii. Cobham recommends that CASA significantly increase the requirements for pilot training on large aircraft. There is also scope for CASA to vary the requirements depending upon the experience and competence of the pilot. For example, CASA may wish to make the requirements for a first endorsement on a large aircraft type more substantial than subsequent endorsements, as is the current requirement for aircraft maintenance engineers,
- iv. There is no CASA recurrent training requirement for pilots. The emphasis of the regulations is on checking to ensure that a standard is maintained. Most operators ensure that each recurrent check has some opportunity for both recurrent training, and also training to introduce new procedures and techniques.
- v. Cobham recommends that CASA introduce a mandatory recurrent training requirement on all operators.
- vi. There is currently no CASA requirement for large aircraft operators to use full flight simulators in the training and checking of pilots. Full flight simulators allow pilots to experience many types of emergency scenario in a highly realistic environment, without putting an aircraft at risk. Cobham recommends that CASA make simulator training and checking mandatory for all multi crew aircraft over 5700kg, for which simulators are readily available.
- vii. CAO 40, which addresses the training and recurrent checking of pilots, arguably has not kept up with the rate of change in the industry in regard to the sophistication of aircraft and the aviation environment. However it is still the critical piece of regulation for pilot training and checking.
- viii. There is no current legislation that deals with pilots who demonstrate ongoing marginal standards. Cobham recommends that CASA require operators to develop retraining requirements in order to raise standards in those who continually demonstrate a marginal standard.

(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.

"CASA must be resourced, in numbers and expertise to keep ahead of an evolving industry"

More and more new regulation is being introduced, much of it cutting edge, without addressing the fact that the legislation that supports it all has effectively remained unchanged for decades.

- i. CASA has as much difficulty maintaining experienced staff as any other aviation operation and for the same reasons. Additionally, CASA staff do not fly regularly, which, for many pilots, would be a reason to move on from CASA as soon as a good flying position was offered.
- ii. Sufficient funding and manpower should be made available to CASA to enable them to keep pace with the Australian aviation industry as it grows in complexity.
- iii. CASA regulation is contained within the Air Navigation Regulations, the Civil Aviation Act, the Civil Aviation Regulations, the Civil Aviation Orders and the Civil Aviation Safety Regulations. The intent, first stated many years ago, was to roll all of the different sets of rules into one document. This has, so far, proved

unsuccessful and, in fact, with the exception of the ANR's, all of these separate sets of rules have continued to evolve.

- iv. Of particular concern to Cobham is that flight operations regulations have remained effectively unchanged for decades. Some of the perceived reasons for this lack of change are:
 - Lack of experienced manpower within CASA to drive change.
 - Differing philosophies of successive CASA CEO's.
 - Introduction of new legislation e.g. drug and alcohol management plans, fatigue risk management systems, safety management systems, global navigation satellite system, electronic flights bags, automatic dependent surveillance etc. that continually draw CASA's attention away from reforming existing legislation.
- v. Lack of standardisation across CASA leads to differing levels of regulation being applied by different CASA offices. Different standards are therefore being applied to similar operations.

(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.

"More legislation is not required if a cultural change can be achieved that encourages pilots, operators and the regulator to report incidents in an atmosphere where a positive safety outcome is paramount, i.e. in a just culture"

A just culture may exist in a mature organisation which can accept that in any incident there are many causal factors and that many individuals, by their actions or inactions, contributed to it. Such an organisation has a commitment to actively encourage individuals to report incidents and hazards and then thoroughly investigate with a view to putting mitigating strategies in place to prevent the incident re occurring. Blame is rarely apportioned because the operator recognises that individuals generally do not intend to create unsafe situations.

- i. The ATSB sets the regulations regarding mandatory reporting for incidents and accidents. Operators and aircrew alike are bound by these regulations. This is an adequate system for dealing with day to day procedural and technical breakdowns.
- ii. Where an operator or an individual persistently breaks the rules or commits unsafe acts there is a risk that any complainant will be penalised by that operator and/or earn a reputation as a whistle blower.
- iii. Both CASA and the ATSB have processes that allow for confidential reporting of such situations. CASA has an Independent Complaints Commissioner, whose role is to accept and investigate anonymous complaints. The ATSB has a similar process called REPCON.
- iv. However, our experience is that these processes are, at times, open to abuse by individuals with a grudge against an operator, or with an industrial issue to push.
- v. CASA has recently introduced legislation that requires high capacity charter, and all RPT operators, to have an approved Safety Management System (SMS).
- vi. Cobham has a healthy reporting culture and grants access to the ATSB, CASA and its various clients and other stake holders.
- vii. It is Cobham's view that a healthy SMS is the key to a just culture.

With the amount of existing legislation and mechanisms that protect the complainant and CASA's move to legislate for Safety Management Systems, and the reinforcement of just culture that SMS's provide, it is Cobham's view that no further legislative immunity is required.

(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:

- a. the Jetstar incident at Melbourne airport on 21 June 2007, and**
- b. the Tiger Airways incident, en route from Mackay to Melbourne, on 18 May 2009;**

(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.

Cobham welcomes any constructive initiative that improves safety and related training, provided that it is well implemented and goes hand in hand with the culture of just reporting.

Any other related matter