

Reducing unnecessary fuel carriage

For many years airlines have been working to reduce the carriage of unnecessary fuel in order to reduce cost. The current price of oil obviously adds a level of urgency to this but there has also been an increased awareness of the environmental impact.

One area that needs to be addressed to reduce unnecessary fuel burn is the lack of Category 3 landing capability at Australian airports. The argument goes that as places like Sydney and Melbourne only experience very few days of fog per year it is not worth upgrading and maintaining the landing systems to allow zero visibility landings. What this fails to account for is that very frequently airlines have to carry extra fuel against the contingency of having to divert whenever fog is *forecast* so there is a cost even if the fog does not eventuate. To give a very rough example, if a pilot flying from Singapore to Sydney wants to have an additional 10 tonnes of fuel on arrival overhead Sydney it may well cost an additional two tonnes simply to carry the extra. For ultra-longhaul the figures would be higher.

With Category 3 (zero visibility) capability it may be that some of this fuel carriage can be reduced. The actual cost-benefit analysis would be complex due to the various fuel policies which different airlines work under. However it should be understood that there is a cost in not having Category 3 capability that is greater than simply the cost of diversions when they occasionally occur.

It may also be that now is not the time to move towards this capability as GPS based approaches may be able to offer something similar in the near future, but for environmental as well as economic reasons any potential savings must be investigated.

Shortage of Experienced Flight Instructors

The current shortage of experienced flight instructors appears to have reached a critical level. In actual fact, this sector of the industry has been very poorly structured for some decades and any efforts to alleviate the shortage must address the fundamental issue of maintaining a reasonable experience level in that sector of the industry. The current crisis should be seen as an opportunity to get things right.

Traditionally much of the flight instruction for the non-commercial and commercial sectors has been conducted by very inexperienced instructors. (I was once in this category.) With few exceptions these pilots move onto other positions with charter companies or airlines as soon as the opportunity presents. Very often even the 'senior' instructors have only two or three years experience and very little effective mentoring takes place. This affects the quality of the training offered which has a detrimental effect on safety. The economic factors that drive this are obvious, but to consider how unhelpful this is, imagine if those instructing medical trainees were graduates from the previous year. It is unlikely that the medical board or the general public would tolerate the situation.

If someone can come up with a way of changing the economic fundamentals to attract and retain experience that would of course help. However, in most fields, people do not teach just for the money and a partial redeployment of experience of qualified people from other sectors of the industry back into instructing is worth investigating. Here are some possible measures that will enable and encourage that:

1. Very many airline pilots have held instructor ratings but their employers do not allow them to fly for anyone else for 'hire and reward.' This is simply because any hours flown reduce the hours that the pilot can fly for his or her employer. (There may also be a conflict of interest argument but this is a minor consideration). A possible solution is to grant a dispensation against the flight time limitations for hours flown in a training aircraft (say, lighter than a certain weight). If some airline pilots could fly a hundred hours a year instructing in a light aircraft on top of the hours flown in an airline jet this would potentially inject much needed experience back into the industry. Clearly this would need to be risk-assessed and negotiated with stakeholders to formulate guidelines, but it should be noted that some jurisdictions already allow this. It is ironic that we allow pilots to take a second job in any field other than actually flying.
2. Further to the above suggestion, there may be a cohort of pilots in the industry who would consider part-time instructing if the hassle of retaining or regaining a rating was reduced. This could be facilitated by delegating instructor renewals to approved persons in the industry. It may even be worth trialing a system whereby CASA Flight Operations Inspectors

conduct flight instructor renewals without charge for suitably qualified pilots who are interested in returning to part-time instructing. The medical industry does this from time-to-time to attract nurses back into the system, so it is not a radical idea. CASA does a very good job in safety promotion but there is still no better way to enhance safety in the industry than by retaining highly qualified instructors.

3. There is already a mechanism in place for training approvals to be granted to 'approved persons' who do not hold instructor ratings. Approvals of this sort should be streamlined. A pilot who has been an instructor with an airline or charter company is not going to go through the hassle and expense of doing an instructor rating but would be invaluable in training pilots for instrument ratings particularly in high performance aircraft. Previous instructional experience should be recognized and utilized.
4. Traditionally in Australia, Type Rating Instructor/Examiner (TRI/TRE) qualifications were not particularly portable, i.e. an instructor in an airline could only train pilots within his/her own airline and it was not possible to work part-time for other airlines or third-party training organizations. In Europe and other jurisdictions the TRI/TRE rating goes on the individual pilot's license. This allows greater flexibility and creates greater incentive for pilots to seek and use their instructor qualifications. This system and facilitating recognition of TRI qualifications from other countries may allow some experienced instructors the opportunity to contribute their expertise to the Australian industry.

I trust that some of these possibilities will assist in raising the level of expertise available in the instructor sector of our industry.