

THE GUILD OF AIR PILOTS AND AIR NAVIGATORS

Position Paper on Pilot Training Standards for Commercial Air Transport

1. Introduction

1.1 It is generally agreed that the standards for training pilots should be as high as possible at every stage of a pilot's career. But in practice in the UK the quality of flying and theoretical instruction, particularly in the initial phases of training is not very high. Is this a major problem? Could it be that some stages in the pilot's career are more critical than others with regard to the standard of training and that previous weak areas can be corrected later? This paper considers some of the factors affecting the quality of pilot instruction and sets out GAPAN's position on training standards.

2. Selection of Candidates for Pilot Training

2.1 The amount of training which individuals require to achieve an acceptable standard as a pilot is directly related to their aptitude. For the recreational pilot this means that the students whose hand-eye coordination etc. is less well developed will need to pay for more time in the air but this need not mean a lower final standard providing the quality of their training is of a high standard. However, for those aspiring to be professional pilots, it is essential that they have the physical and mental aptitudes to enable them to assimilate the training offered by Flight Training Organisations (FTOs) on fixed course syllabi otherwise they are unlikely to find employment with an aircraft operator. This means that comprehensive selection is essential if the candidate is to avoid wasting his time and money. Selection then would seem to be in the best interests of the student and the FTO; but when the economic situation results in a dearth of candidates seeking training, the temptation for FTOs to degrade selection criteria in order to recruit students who are able to pay for the training course, can be overwhelming. Poor quality candidates can lead to poor training standards especially if the FTO then attempts to maintain its students' success rates by focussing on training for the examinations rather than comprehensively equipping the pilot for his future career.

3. Flying Training

3.1 The student looks for the maximum value for his expenditure on training and his search usually begins with the course price. The potential quality of the training on offer is less easy for him to determine. With this in mind, FTOs seek to minimise the advertised price and market courses which satisfy the minimum content demanded by the regulator. FTOs do try to achieve higher standards, such as high overall marks in the final examinations and first time CPL and IR passes, in order to improve the FTO's reputation and thus encouraging airlines to recruit their graduates, which in turn ensures that prospective students are persuaded to enrol.

3.2 The quality of flying training provided by the FTOs can be greatly enhanced by improving instructor capability and monitoring the conduct of training through the establishment of standardization units at FTOs. However, within the smaller FTOs this is usually not an affordable option and even for the larger organisations, these units often come under threat in times of financial constraint. Similarly, new technology can greatly enhance

the effectiveness of training but, even though the improvements in training may be readily apparent, the purchase of new equipment can be unaffordable in straightened times.

3.3 It is possible to change a student's techniques and attitudes which have been learned at an earlier stage of training but the lessons that have been learned first tend to take precedence over later training; bad habits are hard to break and tend to resurface at times of stress. This would suggest that it is highly desirable to employ the most experienced instructors at the very beginning of the student's career. In practice, the reverse is commonplace since it is difficult to assign a new instructor to the more complex instructional tasks until he has gained experience in basic instruction.

4. Academic Training

4.1 The European FTOs provide many hundreds of hours of ground training to cover the theoretical knowledge instruction demanded by the syllabi. Nevertheless, new pilots seem to lack the basic theoretical knowledge to equip them for type conversion. This problem arises in part through the ready availability of the questions and answers to the JAA theoretical knowledge examinations. The temptation for students to study the questions and answers to the JAA examinations rather than to acquire a sound understanding of the subject matter has resulted in ostensibly qualified but frequently ignorant graduates. Many of these pilots struggle to cope with the technical complexities of airliner conversion because they are not conversant with the basic principles.

4.2 The student's motivation to develop this understanding is further eroded by the delays in updating syllabi, much time being devoted to studying increasingly irrelevant topics. This leads to an overall lack of enthusiasm for the academic side of pilot training courses. In an attempt to ensure that the technical knowledge of their recruits is adequate, the airlines have progressively raised their entry level qualifications: 90% is now the typical minimum overall ATPL examination mark demanded. Paradoxically this may have had the effect of lowering academic standards, since only those students who have developed an effective examination technique (learning the questions and answers) can now meet the enhanced requirements.

5. The Airlines and Other End-users

5.1 The airlines (and other end users of the FTOs' graduates) must ensure that their pilots maintain and develop their skills to meet the safety standards expected by the public both now and in the future. There are powerful incentives for airlines to operate their aircraft efficiently and to develop a sound safety culture to avoid costly accidents. Accordingly, managers set high training standards within their airlines to achieve these aims. But all this must be accomplished within the realities of tight budgets and commercial pressures. In the past, when student sponsorship was available, some operators put their students through the cheapest training courses available believing that they could correct deficiencies at a later stage. As stated in para 3.3 above, experience has shown that it is difficult to eradicate poor techniques acquired early on, and it is now accepted that high quality training is more cost effective overall.

6. Multi Pilot Licence

6.1 The Multi Pilot Licence (MPL) could well lead to higher standards for training new airline pilots. The course focuses on the specific needs of the airline and is conducted by an

FTO working closely with that airline. The training is conducted in a multi crew environment from the outset and minimum time is spent on irrelevant aspects such as VFR navigation. Much of the training is conducted on simulators with the last module conducted on the airline's simulator and aircraft. The development of this concept has been wholly driven by industry in response to airlines' demands for more relevant training. This lends weight to the argument that the regulator should not be relied on to improve training standards. Significant numbers of airline pilots have now been trained in Europe and in Australia with apparent success but the final verdict on the success of the MPL system will not be available until these pilots reach the captaincy stage.

7. Regulators

7.1 The UK CAA was at one time one of two regulators (the other being the US FAA) which were regarded as setting the standards to the world for aviation regulation. With the advent of firstly JAA and now EASA, the CAA's lead role in this field has understandably declined as its responsibilities have been progressively removed. The JAA was staffed by experts who brought experience from the principal European NAA's (National Aviation Authorities).

7.2 One of the original aims of the JAA was to have licences appropriate to the task carried out by the pilot: the PPL for recreational flying, the CPL for single pilot commercial operations and the ATPL for multi-pilot air transport operations. These distinctions were soon lost in the compromises which were necessary to achieve concurrence between the nations.

7.3 The conventional licence courses must cater not only for potential airline pilots but also for those who will follow the broad spectrum of other (non-airline) flying activities. However, in meeting the requirements of these many disciplines, the courses will inevitably include skills and knowledge which are not strictly necessary to certain activities. That said, in trying to leave out training regarded as irrelevant, it could be easy to omit essential basic fundamentals: stalling was not considered possible in the A330 which was lost in the South Atlantic so why include it in their training? Who would have thought that fully "qualified", experienced pilots could maintain their modern airliner in a stalled descent until they hit the surface?

7.3 With the demise of the JAA, much of that regulators' expertise disappeared and the replacement European Aviation Safety Agency (EASA) now seems to be staffed largely by legal experts intent on ensuring compliance with EU law. Although EASA has followed the FAA procedures of consulting by issuing Notices of Proposed Amendment (NPAs) and inviting comments from industry, the huge task of harmonising the diverse European national practices while maintaining high standards has been completely beyond the understanding of the lawyers. Commensurate with its diminished responsibilities, and required by the UK Government to levy charges to cover its costs (unlike the rest of Europe with the exception of Denmark), the CAA has lost many of its experts and is thus barely able to ensure compliance with the often flawed EASA regulations. Syllabi need to be regularly reviewed and updated, security of the examination question bank must be improved and the number of questions in the question bank should be greatly increased to a point where studying the Questions and Answers becomes less attractive than getting to grips with the subject matter. The CAA is not well placed to achieve these tasks or to visit the FTOs and encourage the use of new training methods which take account of technological advances.

8. International Comparisons

8.1 The US flying training model is predicated on the better of the FTO graduates undergoing the minimal training required to become flight instructors. This provides a ready cache of new instructors who are prepared to work for minimal wages in order to build up the entry level hours that the airlines require. Some of these new instructors are well motivated and they strive to provide the best instruction they can to their new students. But others regard instruction purely as a means of hours building, probably as a result of having suffered from likeminded attitudes of their own ab-initio instructors. The result is that low aptitude students who have the misfortune of training with poorly motivated inexperienced instructors are told they need more flying hours to reach the standards required on 'check rides', even if it is apparent that they do not have the aptitude to bring the training to a successful conclusion. These unfortunate students eventually run out of cash and drop out but they are the ones who effectively fund the experience required by the instructors aspiring to join the airlines.

8.2 The Australian training system which is most akin to that of the UK appears to have woken up to the decline in training standards. While their Civil Aviation Safety Authority (CASA) has not effected much change in the VFR syllabus for many years, it does now have a secure grip on the pool of theoretical knowledge examination questions. In 2008, CASA established the Flight Training and Testing Office (FTTO) with the aim of improving flight safety through improved training standards. The FTTO has been successful in improving the standard of applicants trained for the Flight Instructor Rating. It has also improved the standards of Approved Testing Officers and is taking steps to improve the feedback of information from examiners to the FTOs. CASA has recently accepted recommendations for improving the selection and training of helicopter instructors. There seems to be growing resistance to adopting the European style regulations in both Australia and New Zealand.

9. Action by GAPAN to Improve Training Standards

9.1 The Guild already has a highly regarded aptitude assessment scheme to provide potential pilot candidates with independent advice on their suitability for a career in aviation. This scheme should be expanded to include a basic personality assessment (e.g. Morrisby Profile). The improvement in the quality of the candidates would enable the FTOs to improve their results and so improve their training standards.

9.2 In order to avoid the "blind-leading-the-blind" situation that pertains in the US, it is essential that candidates for flying instructor courses are carefully selected. It seems to be unavoidable that cash strapped FTOs should seek to employ inexperienced instructors at minimal wages but if training standards are to be maintained, it is essential that only the more capable pilots are selected as instructors and that their instructor training should be comprehensive and effective. The Guild should work with the regulators and industry to promote selection for instructor training.

9.3 The Guild should seek to identify and promote FTOs with high training standards. It should conduct an evaluation not just of the absolute quality but also the value for money of training offered. This could be conducted in partnership with the media (e.g. Flight Training News) when they produce periodic features on the training offered by FTOs. Evaluations should also be conducted as part of the Guild's scholarship programs and successful FTOs should be invited to tender for the opportunity to provide training for scholarship winners. They should be advised why they were successful or unsuccessful after an appropriate evaluation has been carried out. The practice of awarding scholarships to one FTO on the

basis of the previous year's results without considering again the performance of competing FTOs should be discontinued.

9.4 The Guild will not be associated with sponsorship offers from training providers which are deemed to have deficiencies in their training standards. The reasons why the Guild does not wish to be associated with such offers may need to be explained to the would-be benefactors.

9.5 The Guild should give direct endorsement for the FTOs it has identified as having high standards and innovative methods of training, and which offer value for money to trainees. The Guild should commend such FTOs to potential pilots seeking advice at training exhibitions (e.g. Flyer). It should continue to recognise excellence in this field by awards at the annual T&A Ceremony. Conversely, the Guild should not hesitate to publicly withdraw its endorsement from FTOs who let their standards slip.

9.6 The Guild should liaise more closely with the regulators and the airlines and other end users of the FTOs' products to facilitate a more seamless process in training pilots. The advent of the MPL will assist in this but there are a number of other issues arising from the conventional training courses which could be resolved by closer cooperation facilitated by Guild initiatives. For example, the basic upset recovery training carried out by many FTOs should be coordinated with the later upset training delivered on simulators by the airlines.

9.7 The Guild should monitor incident and accident reports with a view to identifying shortcomings in training which may have had a bearing on the occurrence. The recent spate of stalling occurrences may have their origins in the trend towards replacing practical stall recovery training with briefings.

9.8 The Guild should liaise closely with the regulators to encourage a higher licensing standard. Passes in the IR and CPL Skill Tests are increasingly not regarded by industry as adequate indicators of the newly qualified pilot's proficiency. In this context, the Guild should resist the move to select examiners solely on the basis of flying experience: the personality, knowledge and integrity of the examiner are of vital importance. Similarly, the pass marks in the theoretical knowledge examinations do not give a reliable indication of the pilots' technical knowledge as a result of the ready availability of the question bank. The Guild should also liaise with the regulators and the airlines to facilitate modernisation of the academic syllabus to ensure that it is relevant to the current and future demands.

9.9 The Post Implementation Review carried out in June 2009 indicated that CASA's steps to counter falling training standards by setting up a Flight Training and Testing Office had been successful; the Guild should encourage EASA to set up a similar office on the lines of the Australian model.

9.10 The Guild should encourage the establishment of a Parliamentary group interested in furthering the interests of the aviation industry. In particular, it should continue to lobby for the rationalisation of VAT charges on training. This work might be more successful if there was a joint approach to government by GAPAN together with the airlines and the RAeS.

9.11 Recalling that the UK CAA used to be one of the major licensing agencies worldwide, GAPAN should take over the role of promoting a "Gold Standard" of pilot training worldwide.