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The Provision of Training for the OJT Coach

Introduction

The training of controllers is a time consuming and therefore expensive process. Training costs can be calculated for that period of training which takes place at an ATC college but tend to be conveniently forgotten once the student commences On-the-Job-Training (OJT) at an operational unit. The student receives a salary but is not yet of much productive use to the unit. An experienced, senior controller is delegated to train him. To fill one operational position therefore we have two people with a combined output of less than one qualified controller because in order to maintain safety, traffic workload may be reduced. Obviously there is a need to get the student trained as quickly as possible without any loss in quality.

The time spent by a student on OJT can be substantially reduced by:

- i) training on the operational area during simulation and
- ii) training the OJT coach.

Where students have been trained on their own operational environment during simulation training there has been a considerable reduction in the amount of time spent in OJT before validation. If coaches from the operational unit take part in these simulation exercises then even more benefit is derived. By providing the coach with training, not so much on ATC procedure with which he must be familiar, but on the pedagogical aspects then the coach and the training section can derive maximum benefit from the operational environment towards reducing the OJT time for a student whilst still maintaining the high standards required. It is important that the transition from simulation training through OJT to qualified controller be as smooth as possible for the student and as productive to the organisation in terms of training time (money) and controller quality.

Selection of Coach

The OJT coach has a very responsible task to fulfil. It is rarely the case that the "best" controller makes a good coach. Also, many operational controllers obtain much satisfaction from using their skills in controlling aircraft and may be unwilling to become instructors. They do not wish to accept the additional responsibility of training whilst at the same time being more remote from the traffic situation. The OJT coach must be experienced in ATC and be able to get on well with people. Above all he must be highly motivated towards teaching and enjoy the job. Many coaches are unaware of the number and variety of training techniques so that consequently their own techniques are very restricted.

Training for the OJT Coach

In contrast to simulation training OJT is difficult to plan and develop systematically. Safety always has priority. The objective of OJT is to train a student for operational status and unless some thought is given to matching the traffic load to the student's present ability, little or no benefit will be obtained. There are techniques to be learnt so that the coach and student can obtain the maximum benefit from training sessions. The interpersonal relationship between coach and student is very important in creating an optimum atmosphere for learning.

Organisation of On-the-job Training

The coach must be provided with adequate monitoring facilities especially R/T and telephone and be able to "take-over" the frequency rapidly. The number of students and their control positions relative to each other should be so organised that the overall traffic situation is determined by the qualified controllers and not by the students. Duty rosters should allow operational periods for the coaches, without students, so that they remain in practice. The same coach and student should work together for a reasonable period of time. Variations of traffic flow can be reasonably accurately predicted seasonally and daily. Training should be scheduled to match student capability to appropriate traffic complexity. When students are not able to train (e.g. high traffic peaks, lack of staff because of leave commitments etc.) the time can be spent in classroom work, discussion sessions or observation of experienced controllers.

Example:

0600-0830	Students starting OJT	Observation
0830-1100	Discussion/classroom	
0830-1200	Advanced students	
1200-1400	Lunch	
1200-1400	Other students	
1600-2100		

Such a rostering of students is bound to cause administrative problems but since the objective is to reduce OJT time it may be worthwhile. Discussion sessions between student and coach will not only increase the knowledge and understanding of the student but may also reveal areas of inconsistent instruction, misinterpretation of procedures and misunderstandings between previous training and the present on-the-job training. Liaison between the training office and student through the coach will decide when the student is ready for validation. The progress of students should be carefully monitored and any areas of doubt or weakness quickly dealt with. Students should be kept informed of the progress they are making.

Techniques of On-the-job Training

Pre-briefing:

The student should be briefed to ascertain that he is aware of the operational situation, that he knows the required procedures and that he is aware of the effect any unserviceability or restriction may have on his sector.

Taking over control:

Even among experienced controllers this is a time for extreme caution. The coach must ensure that not only does he himself have a complete understanding of the current traffic situation but that his student does also. To do this, both coach and student should receive the hand-over briefing together whilst monitoring the frequency. The coach should ask the student any relevant questions to ascertain that the student is fully aware of the traffic situation and that the coach approves any action intended by the student. Only then should the student be permitted to take over control. There have been examples of incidents arising when two students haven't been changing watch. Because of inadequate monitoring facilities the two coaches had to remove their headsets. The unmonitored and incomplete briefing resulted in an air-miss which could have been avoided had the coaches been able to monitor the hand-over effectively.

During the training session:

The coach is responsible for ensuring that at all times the traffic situation remains safe. At the same time he is providing instruction and guidance to the student. If the student is allowed to become overloaded an unsafe traffic situation may develop which in turn could lead to the student losing confidence in his ability to do the work. The student should be permitted to think and act for himself but if the situation appears to be developing beyond the present level of competence of the student the coach should take over, giving the student an explanation of the action he takes.

Initially the coach may be doing most of the controlling himself but the degree of direct involvement should lessen as the student progresses so that by the end of training the coach is monitoring the student from another position. i.e. the coach: makes decisions, prompts, guides and monitors.

Debriefing:

During the training session, rather than continually interrupt the student and destroy his concentration, the coach should make notes on all items for discussion. After the session the student should be informed of the progress he is making and of any weaknesses in his training. The coach should use specially prepared debriefing forms and discuss all observations with the student. These forms can provide the training office with a record of student (and perhaps coach) performance. Areas of weakness, common to many students, may be found and corrective action taken.

Coach/student relationship:

Both coach and student need to develop respect and confidence in each other. The "know it all" coach and the student who is unable to accept advice and criticism (accompanied by a logical and reasoned explanation) will not get along well.

Many coaches fail to appreciate that the stresses of a student are different from those experienced by a qualified controller. The student has a lack of job maturity and until he qualifies he may feel that his whole career is in jeopardy. Occasionally clashes of personality and

temperament arise. The situation should be discussed with everyone concerned and perhaps the student is allocated to another coach. The student's relationship with other control staff, if unsatisfactory, may prevent the student from making the required progress. An important part of a controller's work is to act as a member of a team and a poor relationship with others could be an indication of a student's unsuitability for the job. Perhaps one of the hardest tasks for any coach is to have to recommend that a student's training be terminated. This decision is not taken lightly but a student under training who does not have the necessary aptitude of the job may be a danger to air traffic and the earlier his future is decided the better.

Summary

On the Job Training is necessary and expensive. To make the most effective use of this time (thus reducing overall training costs) the student may gain "operational" experience during simulation training. Also, by providing training to carefully selected coaches and making them aware of the organisation of OJT and of the techniques available, the greatest benefit can be derived for both the students and the Air Traffic Organisation.

Recommendations

It is recommended that the selection of controllers as OJT coaches is made not only on the basis of experience but also of the motivation and pedagogical aptitude.

It is recommended that all OJT coaches attend a suitable course of training in order to increase their awareness of the techniques available in OJT and of the application of such techniques.

Back to Policy