

**DEPARTMENT OF CIVIL AVIATION
MALAYSIA
AIRWORTHINESS NOTICE**

No: 85	Issue:1	Page: 1
---------------	----------------	----------------

Date: 15 May 2005

APPROVAL OF TRAINING ORGANISATIONS

1. Introduction

This Airworthiness Notice is issued for information and guidance on the requirements and procedures in respect of approval of Training Organizations, pursuant to Regulation 31 (6) (c) of CAR 1996. The objective of the training programme is to prepare eligible candidates for License Without Type Rating (LWTR) examinations conducted by DCA. The information contained in this Notice is based on procedures adopted from BCAR Section L.

2. General

Training Organizations seeking approval to conduct training programmes with reference to paragraph (1), are responsible to provide the training in a manner approved by DCA, in respect of basic aircraft engineering training and preparing students for DCA examinations, for the grant of LWTR. It also gives information on the application procedures and requirements for trainees completing such courses where they differ from those specified in Notice No. 5.

3. APPROVAL OF TRAINING COURSES

3.1 Training programmes (courses) may be approved within:-

- (a) Mechanical Categories ('A' & 'C'). Inclusion of Category 'X' Electrical is allowed provided the training organization meets the condition of paragraph 3.2 and requirements for approval as specified in this Notice, and/or
- (b) Avionic Category 'X' (excluding Compass Compensation and Adjustment) and Category 'R'.

The Approval granted will be related to one or more LWTR Categories only. No approval will be granted in relation to any Type Rating.

3.2 Applications for Approval of a training programme covering periods of training of not less than 3 years and six months for any acceptable group either of mechanical category LWTRs or of avionics category LWTRs will be considered. Applications for variations from the basic courses will be assessed by the DCA which may require adjustment of course duration. The inclusion of additional LWTRs will require consideration of extra theoretical and practical training.

3.3 Application shall be made on Forms JPA-AP7 and JPA-AP7(A), copies of which are obtainable from Airworthiness Division DCA. On completion, the forms including the proposed exposition and other relevant training documentation in support of the exposition, should be sent for assessment to the Airworthiness Division DCA with the appropriate fee. (Refer to Airworthiness Notice No. 9).

4. REQUIREMENTS FOR APPROVAL

4.1 Nominated personnel.

The applicant for approval shall nominate the following: -

- (a) An Accountable Manager as the responsible person whose functions shall include co-ordination of all appropriate departments to ensure compliance with DCA's requirements and with the necessary corporate authority for ensuring that all training commitments can be financed and carried out to the standard required by this Notice.
- (b) A senior person or group of persons acceptable to DCA, whose responsibilities include ensuring that the maintenance training organization is in compliance the requirements of this Notice, shall be nominated. Such person(s) must be responsible to the Accountable Manager. Such person or persons appointed shall advise the Accountable Manager on all technical aspects of training and is responsible on the conduct of the training programmes are in compliance to the agreed procedures and DCA's requirements.
- (c) Sufficient number of instructional staff, whose experience and qualifications shall be acceptable to the DCA, to carry out the training adequately. Account shall be taken of the instructor/student ratio. It will normally be required that personnel experienced in civil aircraft maintenance procedures are employed to supervise the practical training. The ratio of practical assessor to student shall be 1 to 15. The organization shall establish a programme to provide periodic update training for instructors which may include attendance at seminars, type training or observation of maintenance.

- (d) A nominated person to ensure the management of a Quality System referred to in paragraph 4.7 of this Notice.
- (e) Examiners and signatories of course certificates.

4.2 Company exposition.

The organization shall provide an exposition for use by the organization describing the organization and its procedures and containing the following information: -

- (a) A statement signed by the accountable manager confirming that the maintenance training organization exposition and any associated manuals define the maintenance training organization's compliance with this Notice and shall be complied with at all times.
- (b) The title(s) and name(s) of the person(s) nominated in accordance with Paragraph 4 of this Notice, a structure of the organization, the terms of reference of senior and nominated personnel and the associated chains of responsibility.
- (c) A list of instructional staff, examiners and assessors.
- (d) Addresses of locations at which training is carried out and a general description of the facilities available at each site.
- (e) a list of the courses conducted and approved by the DCA.
- (f) the procedures for notification of changes to the organization.
- (g) the amendment procedure for the exposition and associated manuals. Any subsequent amendments shall be approved by the DCA.
- (h) the procedures, including details of the management and control systems, which the organization has instituted to ensure compliance with the requirements for the Approval(s) held.
- (i) The exposition shall be supplemented by a separate procedures manual which gives detailed guidance on the various procedures.
- (j) the maintenance training organization's control procedure when authorised to conduct training, examination and assessments in locations different from those specified in the exposition.
- (k) A list of locations pertinent to paragraph 4.4.6 of this Notice.

4.3 Facilities and equipment

- 4.3.1 The accommodation provided for classrooms, workshops and/or demonstration areas and administrative offices shall be acceptable to the DCA. The number of trainees per class shall not exceed 28 persons.
- 4.3.2 The number of classrooms and workshops (and/or demonstration areas) shall be satisfactory when considered in relation to the intended maximum number of students. Heating, lighting and noise insulation shall be to acceptable standards. Suitable arrangements shall be made for cleaning and maintenance. Classroom furniture, wall boards and equipment shall be to an acceptable standard.
- 4.3.3 Appropriate teaching, demonstration and projection facilities shall be available and shall be maintained to a satisfactory standard. Storage facilities shall be provided for equipment not in use.
- 4.3.4 Workshops shall be provided with basic equipment and hand tools appropriate to the training being given. Instructional equipment, airframes, engines and components sufficient to support the practical training specified in the approved course syllabus shall be provided. Such equipment shall be representative of the technology in current use and appropriate to the license category for which training is being conducted.
- 4.3.5 A library shall be provided for the use of staff and students. Sufficient technical material to support the training conducted shall be provided. This should include relevant legislation publications, typical type related maintenance documentation and other general publications and documents. A nominated person shall be responsible for keeping the material up to date and for ensuring that the facility is maintained to a satisfactory standard.

4.4 Training

- 4.4.1 An acceptable course entry standard, which shall include competence in written and spoken English, shall be specified.
- 4.4.2 Detailed course syllabuses shall be submitted to the DCA for approval. Syllabuses shall be compatible with the relevant examination requirements of Appendix 1 to Notice No. 5. Detailed lesson plans shall be produced showing all practical and theoretical training periods, their durations and the subjects covered to the required levels.
- 4.4.3 Lecture notes, diagrams and other training material supplied shall be prepared in accordance with an agreed procedure and shall be accurate at the time they are given to the students. Where no provision is made for subsequent amendment, written warning must be given to this effect. Care should be taken to ensure that such material is clear and legible.
- 4.4.4 An adequate period of the course must be spent in experience of the maintenance of representative operational aircraft/engines/systems as appropriate to the course. It is essential that the trainee gains a representative mix of experience, to a reasonable depth and complexity, reflecting the sub divisions being taken. This experience must be managed and monitored by the training organization in accordance with an agreed procedure and records must be maintained by the organization.
- 4.4.5 Trainees are required to maintain a training logbook, to be countersigned appropriately, showing the structured practical training achieved in a manner agreed by DCA, including operational (live) aircraft experience. 'Live' aircraft experience may be obtained at a suitable maintenance organization with the agreement of DCA. There shall be a written agreement between the training and the maintenance organizations during the practical training. There shall also be in place an acceptable arrangements for liaison and supervision of the students.
- 4.4.6 Daily attendance records shall be maintained and held available for DCA inspection.
- 4.4.7 The process of monitoring students' progress shall be defined and the required standards shall be specified by the training organization. Such monitoring shall include periodic reviews and the identification of any action required to correct any shortfall in a student's performance. A record of all reviews shall be kept.

4.5 Examinations

- 4.5.1 The training organization shall establish an examination and assessment system to assess the progress of each student and to demonstrate that the student has achieved a satisfactory level of knowledge and skill. This system shall be managed and monitored in accordance with procedures agreed with the DCA. An assessment shall be held at the conclusion of each section or phase of training.
- 4.5.2 A final assessment, representative of all subjects undertaken, will be carried out. As a minimum this will be a written examination, of multiple choice questions and essay type papers, but may be supplemented by an oral examination. The examinations shall be set at a level equivalent to the DCA examinations with a passing mark set at 75%. This final assessment shall determine whether the student has achieved a satisfactory understanding of the subjects within the LWTRs, sufficient to enable an application for those LWTR examinations to be made to the DCA.
- 4.5.3 Examination papers shall be prepared by nominated individuals within the organization. Papers may be prepared from a question databank for each examination sitting or a sufficient stock of papers may be held. Examination papers shall cover the complete syllabus or section of the syllabus concerned. Examples of examination papers shall be submitted to the DCA for assessment, when requested. Each paper shall be identified with a reference number, issue or revision number and serial number. Records of papers shall be maintained. The papers used in any particular examination shall be decided by a nominated examiner or supervisory staff other than the instructor of the subject. Completed examination papers shall be made available to the DCA on request.
- 4.5.4 A system for the management of the development, review and amendment of questions shall be established and records maintained. A regular programme of analysis of examination questions shall be arranged under the direct supervision of a nominated person. The questions shall be reviewed against students' answers and to ensure that they reflect adequately new systems and advances in technology. Records of such reviews shall be kept.
- 4.5.5 Examination databanks shall be kept secure and protected from unauthorised access by adequate computer security means. Examination papers and databank printouts shall be kept in locked cabinets

under the control of the nominated person agreed to by DCA.

4.6 Records.

Unless otherwise agreed with the DCA, examination papers shall be retained for a minimum of five years. Examination records shall not be destroyed without the written agreement of the DCA. Student records and other records required to be kept under the Approval shall be retained for such time as agreed with the DCA.

4.7 Quality System

4.7.1 The organization shall establish procedures acceptable to DCA, to ensure proper training standards and compliance with all relevant requirements in this Notice.

4.7.2 The organization shall establish a quality system including:

- (a) An independent audit function to monitor training standards, the integrity of knowledge examinations and practical assessments, compliance with and adequacy of the procedures, and;
- (b) A feedback system of audit findings to the responsible person(s) and ultimately to the accountable manager referred to in paragraph 4.1(a) to ensure, as necessary, corrective action.

5 REQUIREMENTS FOR MAINTENANCE OF THE APPROVAL

5.1 An Approval granted under this Chapter shall be valid for a year but may be renewed subject to the following conditions:

- (a) the organization continues to satisfy the requirements for the grant of Approval.
- (b) any changes to the nominated personnel and facilities (including location) are notified in writing to and have been accepted by the DCA.
- (c) the exposition and procedures required under this Chapter are reviewed periodically by the organization and any necessary amendments promulgated.
- (d) payment of the appropriate charge.

5.2 The Approved Organization shall adhere to the agreed procedures set out in its exposition. Any variation to these procedures shall have the prior agreement of the DCA.

5.3 The DCA will carry out periodic audits of the structure and procedures of the organization. Any deficiencies noted during an audit will be notified to the management of the organization as a Non Compliance Record. Deficiencies are classified as either, Level 1, Level 2 or Level 3 dependent upon their significance as follows:

- (a) Level 1 –an item of a significant nature which is considered to lower the standard of training or which compromises the conditions or requirements of the Approval. This would warrant suspension of the Approval in whole or in part until corrective action has been taken. The organization would be expected to take steps immediately to rectify any such item.
- (b) Level2 -an item of a less significant nature but which still requires correction to restore compliance with the requirements of the Approval. A Level 2 deficiency would require the organization to offer a proposal for corrective action within a timescale agreed with the DCA.
- (c) Level 3 – item of observations, improvements, enhancements or advisory in nature. Organizations may decide to accept, implement, study or no further action taken.

5.4 The organization shall inform the DCA in writing of intended action and proposed timescales to rectify any deficiency noted under paragraph 5.3. Confirmation that such action has been completed shall also be given to the DCA. The adequacy of any changes or procedures will be reviewed at the following audit.

6 APPLICATION FOR LICENCE WITHOUT TYPE RATING EXAMINATIONS

6.1 Normally, an applicant for DCA examinations is required to meet the requirements as set out in Notice No. 5. However, an applicant at the end of the 3rd year in the training programme specified under this Notice, may apply for DCA LWTR examinations, provided the candidate presents the structured record

of training, in a manner acceptable to DCA, which includes the practical aspects and schedule of work experience on operating aircraft, which forms part of the approved training programme.

- 6.2 Further to paragraph 6.1, an application may be made for DCA examinations in those LWTRs in which the applicant has shown that a satisfactory standard has been reached. The application must be made on Form JPA-5AER together with the appropriate fee and shall include a recommendation by the training organization. If the application is acceptable to the DCA, the candidate will be allowed to undertake the written DCA examinations associated with the grant of those LWTRs.
- 6.3 The total experience on the maintenance of operating aircraft shall be achieved over the 36 month period, 12 months of which must be within the 2 years immediately preceding the date of application. Within the 12 months referred to in this paragraph, 6 months of which shall be relevant to the specific LWTR for which application is being made.
- 6.4 An applicant (former trainee) who has gained a licence and wishes to extend the licence subsequently will be required to show 12 months recent experience of the maintenance of operating aircraft, 6 months of which must be applicable to the LWTR applied for.

7 FAILURE OF DCA LWTR EXAMINATION

- 7.1. A trainee, who fails the first attempt at the DCA examination, may be accepted for re-examination of that LWTR, following a further period of at least 3 months with additional schedule of work on live aircraft, specific to the LWTR applied.
- 7.2 The application for re-examination must be made on form JPA-5AER. If these procedures are not followed the candidate must meet the normal examination requirements set out in Notice No. 5.

8 APPLICATIONS FROM FORMER TRAINEE

- 8.1 A former trainee who has completed the full course of training but has not been recommended by the training organization for DCA examinations will be required to satisfy the normal requirements as specified in Notice No. 5. DCA reserves the right to allow or deny credits to be granted in recognition of the candidate having attended a structured course of training. The applications will be reviewed strictly by merits on a 'case to case' basis.

9. RECOGNITION AS 'AB-INITIO' TRAINING ORGANIZATION

- 9.1. Training organizations approved under this Notice, may be considered the status as an 'Ab-Initio' training organizations (Similar to BCAR Section L Chapter L6) provided:
- (a) The training organizations have established the required integrity based on continuous assessments and audits conducted by DCA.
 - (b) Satisfactory performance of trainees in DCA examinations.
 - (c) The organization continues to adhere to DCA requirements for maintenance of the training approval.

DIRECTOR GENERAL
DEPARTMENT OF CIVIL AVIATION
MALAYSIA