Trinidad and Tobago Civil Aviation Authority



TTCAA Advisory Circular

Subject: AIR OPERATOR TRAINING PROGRAMME APPROVAL PROCESS TTCAA Advisory Circular TAC- 025A Date: 05/03/10

PURPOSE

1. (1) The purpose of this TTCAA Advisory Circular (TAC) is to provide guidance on the approval process for a training programme for an air operator as required TTCAR No. 3:38.

(2) TAC-025A replaces and supercedes TAC-025 which is now cancelled and should be destroyed.

GENERAL

2. (1) TTCAR No. 3:38 and TTCAR No. 3:Schedule 4 specify the requirements for a training programme. TTCAR No. 2 Part IX and No. 2:Schedule 9 give details of crew and flight operations officer training requirements for an air operator. An air operator is required to provide adequate ground and flight training facilities and properly qualified instructors as determined by the TTCAA. In addition to having sufficient depth of knowledge in the aeronautical and technical areas of the curriculum for which he is to instruct or check an instructor should have training on the fundamentals of instructing, including-

- (a) The learning process;
- (b) Elements of effective teaching;
- (c) Student evaluation and testing;
- (d) Course development;
- (e) Lesson planning;
- (f) Classroom training techniques;
- (g) Assessment of student performance in the subject on which instruction is given;
- (h) Analysis and correction of student errors.

(2) Training curriculum approvals follow the five phase general process for approval or acceptance described in TAC-001. The approval process applies to each air operator requesting approval of a new curriculum as with initial air operator certification, or a revision to a currently approved curriculum. Inherent in the approval process is the TTCAA's responsibility to deny approval of any training which does not meet regulatory requirements or which has been found to be deficient. Training curricula which have been granted approval and later found either to be in conflict with regulatory requirements or to be ineffective, should be appropriately modified by the air operator, or TTCAA approval will be withdrawn.

PHASE ONE - INITIATING THE APPROVAL PROCESS

3. (1) The training approval process may be initiated by either the air operator or the TTCAA as follows:

- (a) **Air operator Initiated**. The air operator informs the TTCAA that he is planning to establish a new training curriculum or to change an existing curriculum; or
- (b) **TTCAA Initiated**. The TTCAA informs an air operator that revisions to his training programme are required based on recently acquired information relative to training techniques, aviation technology, aircraft operational history, air operator performance, or regulatory changes.

(2) When a proposal is initiated by the air operator, he should submit the following basic information:

- (a) Type of operation;
- (b) Type of equipment to be operated;
- (c) Geographic areas of operation;
- (d) Proposed training schedules;
- (e) Proposed date of revenue operations;
- (f) Proposed contract training, if any;
- (g) Type of simulator or training device to be used, if any;
- (h) Facilities to be used.

PHASE TWO - REQUESTS FOR INITIAL APPROVAL

4. (1) Phase two begins when the air operator submits his training proposal to the TTCAA in writing, for initial approval. The air operator is required to submit to the TTCAA an outline of each curriculum or curriculum segment and any additional relevant supporting information requested by the TTCAA. These documents should be accompanied by a letter requesting approval of the training curriculum. Two copies of each curriculum or curriculum segment outline should be forwarded along with the letter of request to the TTCAA

(2) An air operator would submit his own specific curriculum segment outlines appropriate to the type of aircraft and kinds of operations. These outlines may differ from one air operator to another and from one category of training to another in terms of format, detail, and presentation. Each curriculum should be easy to revise and should contain a method for controlling revisions, such as a revision numbering system. Curricula for different duty positions may be combined in one document, provided the positions are specifically identified and any differences in instruction are specified for each duty position. Each curriculum and curriculum segment outline must include the following information:

- (a) Air operator's name;
- (b) Type of aircraft;
- (c) Duty position;
- (d) Title of curriculum and/or curriculum segment including the category of training;
- (e) Consecutive page numbers;
- (f) Page revision control dates and revision numbers;

(3) Each curriculum and curriculum segment should also include the following items, as appropriate:

- (a) Prerequisites prescribed by the TTCARs or required by the air operator for enrolment in the curriculum;
- (b) Statements of objectives of the entire curriculum and a statement of the objective of each curriculum segment;
- (c) A list of each training device, mock-up, system trainer, procedures trainer, simulator, and other training aids which require TTCAA approval (The curriculum may contain references to other documents in which the approved devices, simulators, and aids, are listed);
- (d) Descriptions or pictorial displays of normal, abnormal, and emergency manoeuvres and procedures which are intended for use in the curriculum, when appropriate (These descriptions or pictorial displays, when grouped together, are commonly referred to as the flight manoeuvres and procedures document). The air operator may choose to present detailed descriptions and pictorial displays of flight manoeuvres and procedures in other manuals. For example, the flight manoeuvres and procedures document may be described in an aircraft-operating manual. However, as a required part of the training curriculum, it must either be submitted as part of the curriculum or be appropriately referenced in the curriculum);
- (e) An outline of each training module within each curriculum segment (Each module should contain sufficient detail to ensure that the main features of the principal elements or events will be addressed during instruction);
- (f) Training hours which will be applied to each curriculum segment and the total curriculum;
- (g) The checking and qualification requirements for the respective crew position and flight operations officer for all elements of training, including line checks for crew members and familiarization flights for flight operations officers, determine successful course completion.

Additional Relevant Supporting Information

5. When applying for an air operator certificate, an applicant must submit any additional relevant supporting information requested by the TTCAA as required by TTCAR No. 3:4. This additional information is necessary for determining whether the proposed training programme is feasible and adequately supported. It is information which would be difficult to include in a curriculum outline format. The type and amount of supporting information needed will vary depending on the type of training, aircraft types to be operated and kinds of operations. The following list of types of relevant supporting information that is typical-

- (a) A description of facilities is appropriate if the TTCAA is unfamiliar with the facilities, or if the facilities are not readily available for examination;
- (b) A list of ground and flight instructors and their qualifications. This information is particularly important if the air operator intends to use contracted instructors;
- (c) A detailed description of each flight simulator and training device is appropriate when the simulator or training device is not readily available for the TTCAA examination. This description should provide sufficiently detailed information to enable the TTCAA to determine whether the training and checking to be conducted is appropriate for the level of the flight simulator or training device to be used;

- (d) A detailed description of minimum student qualifications and enrolment prerequisites is appropriate when such prerequisites are not described in detail in the curriculum. Examples of these prerequisites which may need to be detailed as supporting information include: type of airman license, aircraft type qualifications, previous training programmes, minimum flight hours, experience with other commercial air transport air operators, and recency of experience. This description may be useful to the TTCAA when determining whether the proposed amount of detail outlined in training modules and the proposed training hours are adequate;
- (e) Copies of training forms and records to be used for recording student progress and the completion of training may be required. This ensures that the air operator has planned for the TTCAR record-keeping requirements. This type of supporting information shall be required of applicants for an air operator certificate. It may also be required of air operators with any significant revision to existing training programmes. These forms, records, or computer transmittal worksheets must be designed so that attendance and course completion information is recorded and retrievable for verifying regulatory compliance;
- (f) Supporting information may include samples of courseware, such as training modules/lesson plans and instructor guides. Descriptions of other types of courseware, such as home study, computer-based instruction, and Line Oriented Flight Training (LOFT) scenarios, should be in enough detail to provide an understanding of how the training will be administered and of the proposed instructional delivery method. This information should describe the instructor/student interaction and indicate methods for measuring student learning.

Initial Review Of Requests For Approval

6. In phase two the TTCAA will review the submitted training curriculum and supporting information for completeness, general content, and overall quality. If the submission is determined to be incomplete or obviously unacceptable, the approval process is terminated and the TTCAA will return the documents with a written explanation of the deficiencies. The documents will be immediately returned, so that the air operator will not erroneously assume the TTCAA is continuing the process to the next phase. The approval process can be resumed when the revised training curriculum or curriculum segment is resubmitted.

PHASE THREE - IN-DEPTH REVIEW OF SUBMITTED CURRICULA

7. (1) Phase three is initiated when the TTCAA begins a detailed analysis and evaluation of a training curriculum or curriculum segment. The purpose of this phase is to determine the acceptability of training curricula for initial approval. The TTCAA will review the submission against the following:

- (a) Regulatory requirements;
- (b) Complexity of the specific aircraft;
- (c) Complexity of the type of operation;
- (d) Amount of detail that needs to be covered;
- (e) The experience and knowledge level of the students;
- (f) Efficiency and sophistication of the air operator's entire training programme (including items such as instructor proficiency, training aids, facilities, courseware, and the air operator's experience with the aircraft).

(2) This phase ends either with the initial approval or the rejection of all or part of the training curriculum.

(3) If after completing these evaluations, the TTCAA determines that the curriculum or curriculum segment is satisfactory and adequately supported and that the training hours are realistic, initial approval would be granted with an appropriate expiration date.

(4) During the period of initial approval, an air operator would be testing and refining his programme to ensure that the detailed requirements for the final approval are met. However, if there are significant revisions to the programme the air operator would need to re-apply to the TTCAA for approval. Final approval will only be granted after the TTCAA has successfully evaluated the training in the demonstration and inspection phase.

PHASE FOUR - EVALUATING INITIALLY APPROVED TRAINING CURRICULA

8. (1) Phase four begins when the air operator starts training under the initially approved curriculum during the Demonstration and Inspection Phase. This phase should provide the air operator with adequate time to test the programme and the flexibility to adjust the programme during evaluation by the TTCAA. An air operator should provide ongoing schedules of all training and checking to be accomplished under an initially approved training curriculum.

(2) Sometimes proposed revisions may be transmitted to the TTCAA just before the initial approval expiration date. If the change is significant, the TTCAA may need to establish a different expiration date for the curriculum segment, or for the revised portions, to allow adequate time for a proper evaluation.

(3) During phase four, the air operator will be required to demonstrate the ability to effectively train crewmembers and flight operations officers. There are four main elements that will be evaluated when assessing the overall effectiveness of training programmes. These four elements are:

- (a) Curriculum segment outlines;
- (b) Courseware;
- (c) Instructional delivery methods and training environment;
- (d) Testing and checking.

(4) Each deficiency identified during the evaluation of training conducted under an initially approved curriculum will be discussed with the air operator. If the deficiencies are significant, they will be documented and kept on file. Each significant deficiency identified would need to be immediately corrected. If an organization does not take corrective action within a mutually acceptable timeframe, the TTCAA would advise the air operator in writing that initial approval is withdrawn.

PHASE FIVE - METHOD FOR GRANTING FINAL APPROVAL

9. (1) Phase Five involves the granting of final approval of an air operator's training curriculum. Based on the results of the evaluation, the TTCAA will determine whether to grant or deny final approval of a training curriculum.

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