The Hashemite Kingdom of Jordan Civil Aviation Regulatory Commission Flight Operations Standards Department المملكة الأردنية الماشمية هيئة تنظيم الطيران المدني دائرة مقاييس العمليات الجوية

ADVISORY CIRCULAR

No.: AC-28-04-013 Date: 15th June 2020

A. SUBJECT.

Guidance for distance learning rules and procedures at an (ATO) Approved Training Organizations (FTO & TRTO Modular Courses).

B. <u>PURPOSE</u>.

This Advisory Circular (AC) provides guidance for distance learning rules and procedures at FTO & TRTO (Modular Courses).

This Advisory Circular remain current unless it is suspended, withdrawn or superseded.

C. Applicability.

This Advisory Circular is applicable to the students from FTO's, TRTO to conduct distance learning where JCARC is the competent authority.

D. STATUS.

This is the first edition of AC-28-04-013 dated 15th June 2020. It will remain current unless it is suspended, withdrawn or superseded. This AC is under the continuous review and assessment in terms of any updating rules or procedures regarding distance learning instructions.

E. CONTENTS.

- 1.0 Distance Learning definition.
- 2.0 Distance Learning back ground.
- 3.0 Distance Learning Program Requirements.
- 4.0 Program Creation.
- 5.0 Evaluation, Testing, and Assessment.
- 6.0 Other Considerations for Distance Learning.
- 7.0 Classroom instructions.

F. REFRENCES.

- JCAR FCL 1. Refer to Appendix 3 to JCAR-FCL 1.055 Approval of Modular Theoretical Knowledge Distance Learning Courses, and AMC JCAR-FCL 1.055(a) Approval of Modular Theoretical Knowledge Distance Learning Courses.
- 2. EASA 1178- Part ORA.
- 3. FAA- AC 147-3B Appendix 11.



AC-28-04-013 Page 2 of 6

1.0 Distance Learning definition.

A method of delivering education and instruction, often on an individual basis, to students who are not physically present with an instructor in a traditional setting such as a classroom. Distance learning enables participation access to learning when the source of information and the learners are separated physically by time or distance, or both subject to the approval of CARC within a suitable facility elsewhere.

2.0 Distance Learning back ground.

- 2.1 A form of information sharing for educational purposes using computer systems instead of the traditional classroom has become known as distance learning (also known as e-learning, home study, self-guided training, virtual classroom, distributed training, computer-based training (CBT), Web-based training (WBT), etc...). Distance learning systems are being effectively utilized by an approved air carrier training programs as a low-cost alternative that allows for flexible scheduling and location settings. Distance learning is a welcome addition to any Aviation Training Organization School (ATO) curriculum.
- 2.2 The ATO may be approved to conduct modular course programmes using distance learning in the following cases:
 - i. modular courses of theoretical knowledge instruction;
 - ii. courses of additional theoretical knowledge for a class or type rating; or
 - iii. courses of approved pre-entry theoretical knowledge instruction for a first type rating for a multi-engine helicopter.
- 2.3 A variety of methods is open to ATOs to present course material. It is, however, necessary for ATOs to maintain comprehensive records in order to ensure that students make satisfactory academic progress and meet the time constraints laid down in Part-FCL for the completion of modular courses.

3.0 Distance Learning Program Requirements.

Refer to Appendix 3 to JCAR-FCL 1.055 Approval of Modular Theoretical Knowledge Distance Learning Courses, and AMC JCAR-FCL 1.055(a) Approval of Modular Theoretical Knowledge Distance Learning Courses.

- 3.1 FTO / TRTO electing to utilize a distance learning program must provide students with an equivalent level of instruction found in a traditional classroom.
- 3.2 The following are given as **planning guidelines for ATOs** developing the distance learning element of modular courses in order to be **approved by CARC:**
 - i. A detailed description of the distance learning technology to be utilized.
 - ii. Procedures describing the how the distance learning program will be administered, to include a description of the how course content



AC-28-04-013 Page 3 of 6

- will be delivered and how instructors and students will communicate as needed.
- iii. Procedures to ensure distance learning course records are kept in compliance with the approved curriculum, to include procedures for tracking student attendance under each subject/topic. ATO must maintain a list of those students who were taught under the distance learning method and make these records available to CARC upon request.
- iv. An assumption that a student will study for at least 15 hours per week:
- v. An indication throughout the course material of what constitutes a week's study;
- vi. A recommended course structure and order of teaching acceptable to CARC;
- vii. One progress test for each subject for every 15 hours of study, which should be submitted to the ATO for assessment. Additional self-assessed progress tests should be completed at intervals of five to 10 study hours;
- viii. Appropriate contact times throughout the course when a student can have access to an instructor by telephone, fax, email or the Internet;
 - ix. Measurement criteria to determine whether a student has satisfactorily completed the appropriate elements of the course to a standard that, in the judgement of the Head Of Traning (HT), or Chief Grounf Instructer CGI, will enable them to be entered for the Part-FCL theoretical examinations with a good prospect of success;
 - x. If the ATO provides the distance learning by help of Information Tecnolgy (IT) solutions, for example the Internet, instructors should monitor students' progress by appropriate means.
 - xi. Where an assessment (e.g. planning, written, scenario or practical exercise, or other assessment) is conducted outside the classroom via distance learning, the ATO should have a procedure or process in place to establish that the student themselves have completed the assessment and that the assessment method(s) for that particular exercise has (have) been effective.
- 3.3 FTO/ TRTO must establish a timeframe for distance learning delivery. The timeframe should align with program semester/defined end dates.
- 3.4 The FTO/ TRTO Head of Training will review the distance learning program to ensure this adequately describes how students will be taught course content.
- 3.5 **Instructors Regulation**. All instructors shall be fully familiar with the requirements of the distance learning course programme. Instructors will initiate substantive communication with their students, either individually or collectively, on a regular basis. In other words, an instructor could use email to provide instructional materials to students enrolled in his or her class, use chat

COMMANDER REQUESTORY

COMMANDER REQUESTORY

AC-28-04-013 Page 4 of 6

features to communicate with students, set up conference calls to facilitate group conversations, engage in email exchanges or require students to submit work electronically that the instructor will evaluate.

- 3.6 The FTO/ TRTO must set procedures for annotating the student record documenting attendance.
- 3.7 A distance learning program will ensure compliance with Appendix 3 to JCAR-FCL 1.055 &AMC JCAR-FCL 1.055(a) Approval of Modular Theoretical Knowledge Distance Learning Courses prior to conducting distance learning. Specifically, an acceptable distance learning program will include written policy and procedures describing:
 - i. How the distance learning program will be administered;
 - ii. A description of the examination and testing process;
 - iii. Methods for ensuring the integrity of student work and compliance with CARC minimum standards.
 - iv. Procedures for proctoring computer-based exams in a remote location;
 - v. Procedures to ensure distance learning course records are kept in compliance with the approved curriculum;
 - vi. A description of the technology hardware and software to be utilized;
 - vii. Proper identification of courses available through distance learning;
 - viii. A sophisticated Electronic Learning Management System (ELMS) to track all aspects of the distance learning program, including attendance, participation, and performance (including comparisons to traditional classroom test scores and completion rates); and
 - ix. CARC "read only" access to the ELMS (to facilitate surveillance).
- 3.8 The approval to conduct training via the distance learning program will be provided to the FTO/TRTO by CARC.

4.0 Program Creation.

- 4.1 Not all courses are suitable for distance learning. Criteria for determining what subject matter may be provided through distance learning includes:
 - i. Subjects that have historically been taught through lecture or written papers;
 - ii. The level of computer competency required for successful completion of a course delivered via distance learning;
 - iii. The amount of in-person work required, such as lab work; and
 - iv. A system and methods to be used for timely and appropriate interaction between students and instructor(s).
- 4.2 Distance learning curriculum may also be made available as an in-person course.

AC-28-04-013 Page 5 of 6

5.0 Evaluation, Testing, and Assessment.

5.1 Testing for students participating in distance learning activity can be a special challenge. Testing can be accomplished through a variety of methods, including:

- i. Oral evaluation;
- ii. Paper-based; or
- iii. Computer-based exams proctored by an evaluator.

NOTE: Proctored exams (testing) at a remote location may only be accomplished within the facilities of another active ATO or accredited educational institution, or through an approved remote proctoring system. The procedure must be documented in a written agreement between each participating ATO while holding the originating part FCL school responsible for all aspects of the test.

- 5.2 The testing method used and the types of questions employed should suit the objectives to be tested, Keeping in mind that knowledge objectives are typically assessed by written, electronic, or oral testing.
- 5.3 FTO/ TRTO shall determine stage checks and end of course tests that will be administered during the period of the distance learning.

Each stage check and end of course test must be identical to the checks and tests that are normally administered. Each student will be given the check or test through a testing platform. This list is not all inclusive. Any method that is utilized must ensure the integrity of the test. Provides identification of the student, is able to maintain the confidentially of the answers provided by the student, and maintains access control. If needed, testing can be postponed until students can return to the classroom.

6.0 Other Considerations for Distance Learning.

- 6.1 Reliability & Availability. A distance learning system must have sufficient redundancy and fault tolerance capability to provide continuous availability of required training materials 24 hours per day, 7 days per week.
- 6.2 **Security.** Access to the Electronic Learning Management System (ELMS) should be limited to authorized personnel of the ATO, students, and CARC (read only).
 - i. FTO/TRTO may choose to allow various users to access the system via different methods, links, and times. Access rights must be controlled by a system administrator. FTO/TRTO's security plans must describe how the system will recognize and deal with attempted unauthorized access.



AC-28-04-013 Page 6 of 6

ii. FTO/ TRTO must maintain the security of all checking and testing. Test results must be provided to each student in a timely manner after the end of the course completion.

iii. Care should be exercised to ensure that system security is adequate to ensure proper protection of materials and users, but not so rigid that it impacts the ability for training management and training development personnel to efficiently accomplish their duties. Deficiencies found within the distance learning program during surveillance must be identified and brought to the attention of the ATO for necessary correction. An ATO with approval to conduct distance learning must continually operate to meet the requirements of the approved distance learning program to enable continued approval authorization to conduct distance learning.

7.0 Classroom instructions.

- 7.1 An element of classroom instruction shall be included in all subjects of modular distance learning courses.
- 7.2 The amount of time spent in actual classroom instruction shall not be less than 10 % of each subject of the total course duration.
- 7.3 To this effect, classroom accommodation shall be available either at the principal place of business of the ATO or within a suitable facility elsewhere.
- 7.4 Classroom instruction delivered by an instructor to a student may include videoconferencing appropriate to the task if the necessary level of communication is ensured and appropriate equipment and tools are available.

Capt. Haitham Misto Chief Commissioners