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Advisory Circular

Subject: NATIONALLY SCHEDULED FEDERAL
AVIATION ADMINISTRATION (FAA)
APPROVED, INDUSTRY-CONDUCTED FLIGHT
INSTRUCTOR REFRESHER CLINICS

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Initiated by: AFO-840

AC No: 61-83B
Change:

1. PURPOSE. This advisory circular provides guidance on the preparation and approval of a training course outline (TCO) for an industry-conducted Flight Instructor Refresher Clinic (FIRC) and sets forth guidelines to assist qualified sponsors/organizations in obtaining approval for the use of a designated Airman Certification Representative (ACR) employed solely by the FIRC sponsor.
2. CANCELLATION. Advisory Circular 61-83A, dated November 3, 1980, is canceled.
3. BACKGROUND. The Federal Aviation Administration (FAA) Flight Instructor Refresher Program was initiated in 1965 to provide for the standardization and updating of certificated flight instructors. FAA Aeronautical Center's team participation in FIRC programs was terminated on October 1, 1977. Since that date, the FIRC program has become firmly established in industry hands. Industry-conducted clinics now provide one acceptable means whereby flight instructors may periodically attend FAA-approved training programs to update their knowledge of regulations and operating procedures, gain exposure to new techniques and teaching concepts directly associated with the functions and responsibilities of a certificated instructor, renew their flight instructor certificates, and/or maintain qualifications as chief flight instructor under Federal Aviation Regulations (FAR) Part 141.
4. DEFINITIONS.
 - a. Training Course Outline (TCO). An abbreviated list of training as it is offered in any one course of instruction.
 - b. Curriculum. The overall general content of a course of instruction.
 - c. Training Syllabus. A step-by-step (building block) progression of learning with provision for regular review and evaluation at prescribed stages of learning. The syllabus defines the unit of training, states by objective what the student is expected to accomplish during the unit of training, shows an organized plan for instruction (building block--from the simple to the complex), and dictates the evaluation process for either the unit or stages of learning.
 - d. Lesson Plan. The instructor's plan for teaching a unit of learning. It is the basic method of presenting an orderly flow of information to a student based on the student's way of learning.

e. Objectives. Course, stage, and lesson objectives should describe in behavioral terms what students are expected to know or be able to do at the end of a particular course, stage, or lesson.

(1) Course objectives should state in broad terms the knowledge and skill goals to be reached by the student at the end of the course.

(2) Stage objectives should be more limited and state desired student goals in specific areas of knowledge and skill.

(3) Lesson objectives should clearly specify desired student outcomes and should be consistent with the objectives of the course and stage. Objectives should be carefully reviewed to ensure that they actually conform to the standards of this paragraph and are not, in fact, descriptions of a course, stage, or lesson.

f. Content. The content should identify the specific subject matter that will be taught for development of the student's knowledge and/or skills necessary to meet the course, stage, and lesson objectives and completion standards. The content should support the objectives, be arranged in a logical sequence, and be attainable within the estimated stage and course. Reasonable variances in the time frame, to accommodate individual learning differences and other situations that may arise from time-to-time, should be considered when determining the adequacy of the estimated time frames of stages, courses, or lessons. It is for this reason that certain flexibilities should be built into the time allotted for the lesson presentation. FAR Section 61.197(c) permits the renewal of a valid flight instructor certificate without taking the practical test if the applicant has successfully completed an approved flight instructor refresher course consisting of not less than 24 hours of ground or flight instruction, or both, as appropriate to the TCO utilized, within 90 days before the application is made. There are no provisions for a deviation to the 24 hours of instruction and credit will not be given for time not actually expended in presenting this 24 hours of flight or ground instruction, as appropriate. The chief instructor is responsible for ensuring that all lessons are completed and the lesson objectives are achieved during the 24-hour period. Pre-course registration, breaks, or lunch periods may not be considered as part of the 24 hours of instruction under FAR Section 61.197(c).

g. Completion Standards. The completion standards should state the observable or measurable level of knowledge and skill required at the end of the course, stage, or lesson. For example, the following statement, "The attendee must score a minimum of 70 percent on each oral or written examination given," would combine both the measurable and observable. These standards should be consistent with the objectives.

5. APPLICATION FOR FAA-APPROVED FIRC PROGRAMS.

a. Organizations or individuals who desire to conduct FAA-approved FIRC programs should submit an outline of their proposed training course for FAA approval. Application for approval should be made at least 60 days before any training under the course is scheduled to begin. The FAA encourages applicants for approval to be innovative and explore the use of new techniques and teaching concepts, as well as diversity in subject material. While standardization of the

subject matter presented in any one subject area is paramount, it is not necessary that each applicant include all of the same subjects within the curriculum developed for flight instructors.

b. The FAA seeks to ensure program standardization and coverage of subject areas believed essential to achieve the maximum level of competency among flight instructors. The FAA will consider approval of two classes of curricula, Class "A" and Class "B". Mandatory subject areas, as outlined in appendix 1, will be required in all Class "A" curricula submitted for approval. Class "B" curricula may consist of subject areas selected solely by the applicant. The FAA may, however, from time to time, recommend special emphasis subject matters. These curricula are described as follows:

(1) Class "A." Curriculum consisting of not less than 24 hours of ground or flight instruction, or both, presented in programs scheduled for not less than three and no more than five consecutive day periods. A minimum of 12 hours ground instruction in this curriculum must be based on mandatory subject areas selected from the subject areas listed in appendix 1. The remaining 12 or more hours of instruction may be based on subject areas selected by the applicant. This curriculum should reflect the high standards of excellence expected of FIRC program sponsors authorized to issue flight instructor certificate renewals to applicants upon successful completion of an FAA-approved FIRC program in accordance with FAR Section 61.197(c). Holders of Class "A" TCO's may be authorized to have on their staff a designated ACR employed solely by that sponsor.

(2) Class "B." Curriculum consisting of not less than 24 hours of ground or flight instruction, or both, and consisting of subject areas selected by the applicant that are of high quality and pertinent to flight instructor's needs.

(3) Organizations applying for TCO approvals are encouraged to submit more than 24 hours of lesson plans on selected subject areas to ensure maximum program balance and flexibility.

c. To expedite the approval process, it is desirable that prior to initial contact with the FAA, applicants carefully consider goals and objectives desired, the end product they are attempting to develop, and outline the appropriate class curriculum and instructional subject areas they intend to present which will achieve the desired goals. The applicant may wish to concentrate on only a few subject areas appropriate to flight instruction, or the applicant may wish to include a broad range of such subject areas. It is desirable, however, that these curricula be innovative and contain features which are representative of the highest professional standards relating to what the flight instructor needs.

6. DEVELOPMENT OF TCO. Each TCO should include the following elements:

a. Curriculum. The curriculum should contain a broad outline of subjects to be taught in the course, including:

(1) A description of the classroom facilities including the minimum space to be allotted for each attendee to ensure adequate climate, environmental, and noise control necessary to provide an effective training atmosphere.

(2) A description of audiovisual aids, projectors, tape recorders, mockups, aircraft components, and other special training aids used for classroom and other ground instruction.

(3) The name and qualifications of the chief instructor responsible for conducting the clinic.

(4) The minimum qualifications and ratings for each instructor used in connection with the sponsor's program. It should be noted that individuals utilized as instructors should be recognized as experts in their field and for the course material being presented. These persons are not required to possess instructor certificates.

(5) A means for recording revisions, additions, deletions, etc., to ensure approval chronology is maintained.

(6) A daily schedule, including the start and stop times for each lesson and the lesson title. There is usually a series or combination of possible schedules, and each sponsor is encouraged to submit more than one schedule to cover these combinations.

b. Training Syllabus. In addition to the items specified in subparagraph a, the TCO should include a training syllabus that contains at least the following information:

(1) The prerequisites for enrollement in the course.

(2) A description of each lesson, both ground and/or flight, including its objectives and standards, and the measurable unit of accomplishment or learning to be derived from the lesson or course.

(3) The test(s), checks, and/or methods used to measure a student's degree of accomplishment for each stage of training.

(4) The minimum/maximum time allotted for presentation of each lesson.

c. Lesson Plans.

(1) A lesson plan for each lesson in the TCO, including the objectives, content, and completion standards.

(2) The objective means used to measure the expected learning outcomes at the completion of each lesson. Each page of the clinic TCO should be sequentially numbered or lettered, as appropriate.

d. Testing. For Class "A" curricula submitted for approval, each applicant should submit the written tests to be administered at the completion of each stage of training. To ensure successful completion of the clinic, attendees should attain a minimum of 70 percent on all tests administered.

e. Remedial Training.

(1) The applicant who intends to provide remedial training and/or testing to attendees who, for whatever reason, do not successfully complete the stage tests given during the course, should include in the TCO a method of remedial training and/or testing to ensure satisfactory course completion before a graduation certificate is issued.

(2) The applicant who does not intend to provide remedial training and/or testing should include a statement in the TCO to the effect that remedial training and/or testing will not be provided and graduation certificates may not be issued to attendees who fail to attend or satisfactorily complete the full course requirements, as approved.

f. Instructor Training/Briefing.

(1) Each applicant should include a training program to ensure that each instructor used in the presentation of the clinic thoroughly understands the course, phase, lesson objectives, and completion standards prior to their initial participation in the course, and at least once each 12 months thereafter or prior to their use following a significant change in the TCO.

(2) Guest instructors/lecturers or panelists should be briefed concerning the course, phase, lesson objectives, and completion standards by the chief instructor prior to their participation in each course to ensure adherence to the appropriate lesson plans(s), time frame allotted, and appropriate FAA policy.

g. FAA Participation. FAA personnel may participate by forum or by presentation up to a maximum of 2 hours by prior agreement with the FIRC sponsor.

7. TRAINING AIDS. An FAA-approved FIRC may include the use of a variety of training aids to improve communication between an instructor and the participants. Good instructional aids are devices which assist an instructor in achieving goals in the teaching/learning processes by presenting, supporting, or supplementary material, usually intermittently. Aids should be easily understood and compatible with the learning outcomes expected in the completion standards for the lesson. Visual aids which do not appeal to the visual senses of the viewer have no value in the learning process. Recordings of sounds should be tested for correct volume and quality in the actual environment in which they will be used. Visual aids, if used, should be visible to the entire class. Lettering and illustrations should be large enough to be easily seen by the students farthest from the aids. Colors, when used, should be clearly contrasted, easily visible, and arranged in accordance with color spectrum sequence recommended for visual presentations. For example, pleasing colors such as blue, green, and pastels are preferred over colors such as red, yellow, or black. The latter colors should be avoided unless their use is necessary to make a point. The most common error in constructing vu-graphs, slides, or other visual presentations is to attempt to contain a vast amount of information on each visual. The best results are attained in visuals which are simple and contain a single thought or message. For example, the reproduction of an entire sectional chart projected onto a screen to emphasize the airport information block would contain too much clutter to be effective. A follow-up visual which highlights the airport data block only would be extremely effective in carrying the message to the clinic attendees and would be visible from any spot in a large room.

a. The effectiveness of instructional aids will be judged by their organization, sequencing, pattern of logic, and their overall effectiveness when used in support of and in obtaining the objectives and standards prescribed in the training syllabus.

b. In recent years, an abundance of excellent new material and techniques in the field of training aids has been developed which present many advantages for the instructor clinic. Each sponsor, however, must keep in mind the teaching goals to be achieved, including the continuous monitoring of the participant's progress necessary to develop effectively the knowledge of each participant according to the training syllabus.

c. It is desirable that the chief instructor or the authorized qualified representative determine through personal review or testing that the standards for each lesson have been attained. The purpose of this personal review or testing is to ensure that the participant meets the completion standards and understands any questions missed. Only through such evaluation can the instructor make a sound determination that the participant should progress to the next lesson, or review as necessary the subjects or procedures previously covered.

8. FAILURE TO COMPLY WITH AN APPROVED TCO. The failure of an organization or its representatives to comply with an approved course of training, or to effect such corrective action as deemed appropriate, is basis for denial or withdrawal of the approval and associated delegation of authority, such as for an ACR. When revision to an approved TCO, or related corrective action is determined to be necessary, the sponsor will be given a reasonable time (not to exceed 60 days) to effect the necessary revision or corrective action, as appropriate.

9. GRADUATION CERTIFICATE ISSUED/RECORDS/APPLICATION TO FAA.

a. The organization or individual holding approval will ensure that at the conclusion of each clinic, each successful graduate is issued a sequentially numbered graduation certificate containing:

- (1) The full name and address of the organization approved to conduct the clinic;
- (2) The full name and address of the graduate;
- (3) The date of issuance;
- (4) The signature of the chief instructor; and
- (5) The Class "A" or Class "B" curriculum under which the graduation certificate is issued.

b. The FIRC sponsor should maintain a record of the complete name and address of all attendees, whether a graduation certificate was issued or denied, and if denied, the reason therefor. This record should be maintained for a period of at least 12 months.

c. Acceptance of a graduation certificate as the sole basis for flight instructor certificate renewal under FAR Section 61.197(c) remains the option of the FAA.

d. The capability for renewal of flight instructor certificates by a given FAA district office is based on work priorities and available work force. Therefore, to avoid placing an unscheduled workload upon a particular district office, sponsors are encouraged to have their graduates renew their flight instructor certificates at intervals rather than as a group upon completion of an FIRC program. Further, applicants may renew either in person or by mail. However, if renewing by mail, the applicant should ensure that the mailed application contains complete documentation of all items necessary for renewal and that the mailed application reaches the FAA district office prior to the expiration of either the pilot's flight instructor certificate or the graduation certificate issued by the FIRC sponsor.

10. SCHEDULING OF CLINICS. The approved organization or individual will be expected to advise the FAA's General Aviation and Commercial Division, AFO-800, of its intent to conduct an FIRC not less than 45 days prior to the scheduled date any clinic is to be presented.

11. APPLICATION FOR TCO APPROVAL/REVISION TO EXISTING APPROVALS. Application should be made by letter to the FAA, 800 Independence Avenue, SW., Washington, D.C. 20591, Attention: General Aviation and Commercial Division, AFO-800.

a. For original approvals, the original and one copy of the proposed clinic TCO should accompany the request.

b. For revision(s) to a currently approved TCO, the original and one copy of the proposed change/supplement should be accompanied by a letter which clearly identifies the change or supplement as either:

(1) Revised lesson plan(s) or page element(s) to be inserted in the TCO in lieu of existing sequentially numbered lesson plan(s) page element(s); or

(2) Supplemental lesson plan(s) sequentially numbered or lettered as alternate lesson plan(s) to be used at the discretion of the sponsor in achieving maximum program flexibility.

c. When the TCO or revision submitted for approval is deemed acceptable, it will be stamped showing approval and the original of the two copies will be returned to the applicant. The copy will be retained by the FAA in the sponsor's FIRC file. Should the TCO or revision submitted require correction or change before FAA approval can be granted, it will be returned to the applicant with a description of the changes necessary for approval.

12. APPLICATION AND APPROVAL OF AN AIRMAN CERTIFICATION REPRESENTATIVE (ACR) EMPLOYED SOLELY BY AN FIRC SPONSOR.

a. Application for the designation of an ACR authorized to issue flight instructor certificate renewals to eligible course graduates of specified FAA-approved FIRC's should be submitted by letter to the FAA General Aviation District

Office or Flight Standards District Office that has jurisdiction over the area in which the applicant's principal business office is located. Only the holder of a Class "A" FAA-approved FIRC/TCO may apply for an ACR designation. Authority to issue flight instructor certificate renewals to graduates of FIRC Class "B" TCO's will not be issued. The FAA district office will forward the request for ACR designation through the appropriate regional office to AFO-800 for concurrence with the action indicated.

b. The sponsor of an FAA-approved FIRC holding Class A approval may request an ACR designation for one or more responsible members or employees of the organization represented and should provide at least the following information:

- (1) The original date of FAA approval of the sponsor to conduct FIRC programs;
- (2) The number of programs given in the 12 months immediately preceding the request for ACR designation;
- (3) The number of flight instructor attendees issued graduation certificates, the number denied and the reason(s) for denial; and
- (4) The number and location of programs expected to be scheduled (FIRC) for the 12-month period immediately following the date of request for designation and the expected number of attendees at each scheduled location.

c. Requirements for Designation. In order to be designated as an ACR for an FIRC sponsor, a person must:

- (1) Be at least 21 years of age;
- (2) Have a good record as a pilot and a good reputation in the industry for honesty and dependability and known to work harmoniously with the FAA; and
- (3) Have the written recommendation of the sponsor involved when the person is other than the sponsor or individual making application, yet still employed by the sponsor.

d. Eligibility Requirements. To be eligible for selection as an ACR, the candidate for designation must:

- (1) Hold at least a commercial pilot certificate and a valid flight instructor certificate with at least one category rating or a ground instructor certificate with advanced rating; and
- (2) Have been employed as either a chief flight instructor, an assistant chief flight instructor, a ground instructor of an FAA-approved school, or other position(s) of equivalent responsibility for at least 12 months immediately preceding the request for designation.

e. Privileges and Limitations. An ACR employed solely by an FIRC sponsor is subject to the following privileges and limitations:

(1) An ACR may, after review of the student/attendee's training record and eligibility, renew a valid flight instructor certificate of an FIRC course graduate who meets the requirements of FAR Section 61.197(c);

(2) An ACR may accept applications only from eligible course graduates of Class "A" TCO program(s) given by the sponsor or organization by whom he/she is employed; and

(3) An ACR may not conduct written, oral, or flight test(s) in connection with his/her duties as an ACR employed by an FIRC sponsor.

13. DURATION OF APPROVAL OR DESIGNATION/RENEWAL

a. FAA approval of an FIRC TCO will expire 3 years from date of issue unless the organization or individual holding the approval has, within 30 days of the pending expiration, notified the General Aviation and Commercial Division, AFO-800, by letter, of its intent to continue to conduct FIRC programs and requested renewal of FAA approval.

b. Renewal of an FIRC TCO may be issued or denied on the basis of the sponsor's record of activity, compliance with program guidelines, and technical currency of program TCO.

c. An ACR designation expires one year from the date of issuance and may be renewed for a period not to exceed one year on a recurring basis.

d. Renewal of an ACR designation is not automatic. Application for renewal should be submitted to the FAA district office of jurisdiction within 30 days of the pending expiration of designation.

14. WITHDRAWAL/CANCELLATION OF FAA APPROVAL OF TCO OR ACR DESIGNATION HELD.

a. Without a letter of intent on file (following original approval) as referenced in paragraph 13a, each FAA-approved TCO reaching expiration will be withdrawn and all materials returned to the organization or individual involved. If undeliverable, the FAA will not be responsible for retaining the TCO or locating the sponsor. An ACR designation, if held, will become invalid. Notification of cancellation of the ACR designation will be issued in accordance with appropriate FAA guidelines and procedures.

b. FAA approval of an FIRC TCO may be withdrawn and/or an associated ACR designation held cancelled when justified on the basis of an unsatisfactory inspection or monitoring by the FAA, or when discrepancies noted in an FIRC sponsor's program or associated ACR's certification files are not made in a satisfactory or timely manner.



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APPENDIX 1. REQUIRED INSTRUCTIONAL SUBJECTS FOR FAA-APPROVED CLASS A TCO CURRICULUMS

The listed subject areas are those in which instruction is required to be given by holders of FAA-approved Class A TCO curriculums. Not less than 12 hours of ground/instruction in subjects selected from the listed subject areas must be given in each program presented on the basis of an FAA approved Class "A" TCO:

1. Collision Avoidance Precautions.
 - a. See and be seen concept.
 - b. Visual scanning methods.
 - c. Accurate position reporting by pilots when communicating with Air Traffic Control.
2. Regulations.
 - a. Special use airspace.
 - b. Controlled airspace.
 - c. Endorsements required.
 - d. Aircraft checklist.
 - e. Certificates and documents.
3. Analysis and Performance of Maneuvers.
 - a. Short and soft field operations.
 - b. Crosswind techniques.
 - c. Use of performance charts.
 - d. Weight and balance.
4. Aerodynamics.
 - a. Stall/spin considerations.
 - b. Flight at minimum controllable airspeed.
 - c. Balked landing climb.
 - d. Maximum performance maneuvers.
 - e. Load factors.
5. Weather.
 - a. Procuring weather information.
 - (1) On airport.
 - (2) Off airport.
 - (3) Enroute.
 - b. Analysis.
 - (1) Use of weather reports and forecasts.
 - (2) Visual indications of change in weather/marginal conditions.

- c. Hot/Cold Weather Operations.
 - (1) Density altitude operations.
 - (2) Hazards of ice and snow.
 - (3) Seasonal weather precautions.
- 6. Flight Test Guides/Standards.
 - a. Contents.
 - b. Discription of standards.
 - c. How to use effectively.
- 7. Advisory Circular System.
 - a. Publications available.
 - b. Sources.
 - c. How to use effectively.
- 8. Fundamentals of Instruction.
 - a. Lesson plans.
 - b. Student instruction.
 - c. Learning blocks.
 - d. Learning plateaus.
 - e. Teaching at the application level.
 - f. Effective communications.
- 9. Basic Instrument Flight.
 - a. Basic attitude instrument flying.
 - b. Inadvertent IFR.
 - c. Partial panel.
 - d. Ensuring pilot competency in instrument flying skills.
- 10. Judgment.
 - a. Altitude of instructor toward safety.
 - b. Exercising judgment as a flight instructor.
 - c. Teaching judgment.
- 11. Aircraft Accidents/Incidents.
 - a. Analysis.
 - b. Anatomy of an accident.
 - c. Reporting requirements.
- 12. Professionalism in Flight Instruction.
 - a. The instructor's image.
 - b. Values and goals.
 - c. Benefits of advanced training.