

Advisory Circular

GUIDANCE FOR THE FLYING INSTRUCTOR RATING

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GENERAL

Pursuant to paragraph 88B of the Air Navigation Order, the Director-General of the Civil Aviation Authority (DGCA) may, from time to time, issue Advisory Circulars (AC) on any aspect of safety in civil aviation. This AC contains information about the standards, practices and procedures acceptable to CAAS. The revision number of the AC is indicated in parenthesis in the suffix of the AC number.

PURPOSE

This AC provides to the guidance on:

- (a) training courses for a Flying Instructor (Type Rating);
- (b) training courses for an Assistant Flying Instructor or Flying Instructor (AFI/ FI) Rating for single pilot aircraft; and
- (c) renewal requirements for AFI/ FI conducting training on single pilot aircraft who is 65 years of age or older.

APPLICABILITY

This AC is applicable to all Flying Clubs, Aviation Training Organisations and AOC holders seeking approval for their AFI/ FI Rating courses. This AC is also applicable to AFI/ FIs who intend to continue providing flight instruction on a single pilot certificated aircraft and who is 65 years of age or older.

CANCELLATION

This AC supersedes AC FCL-8(1) dated 5 March 2014.

EFFECTIVE DATE

This AC is effective from 13 November 2020.

REFERENCES

Singapore Air Navigation Order (ANO); Singapore Air Safety Publication Part 2 (SASP 2); Singapore Air Safety Publication Part 3 (SASP 3); Singapore Air Safety Publication Part 10 (SASP 10).

1 INTRODUCTION

- 1.1 Pursuant to paragraphs 20(13)(a) and 20(13)(c) of the ANO, any course of training or instruction must be approved by the Director-General of Civil Aviation (DGCA).

2 THE FI (TYPE RATING) COURSE

- 2.1 There should be three parts to an FI (Type Rating) course, as follows:

Part A - Pedagogical training and exercises

Part B - Handling, instructional and take-over skills

Part C - Simulator instructional practice to proficiency

- 2.2 Depending on the qualification of the instructor, he or she may not be required to complete certain parts of the course. The entry levels and the necessary parts of the course to be completed are indicated in the table below.

Qualification	No FI Rating experience, or FI Rating lapsed >2 years	FI Rating lapsed >3 months but ≤2 years	Current FI changing aircraft type
Parts of course			
A	Yes	No	No
B	Yes	Yes	Yes
C	Yes	Yes*	Yes*

* Elaborated in paragraph 2.5.4.

2.3 Part A - Pedagogical Training and Exercises

- 2.3.1 The core instructional training should comprise of lectures, exercises and tutorials.

- 2.3.2 The aim of Part A of the FI (Type Rating) course is to ensure that the instructor:

- (a) understands the concepts of Threat and Error Management (TEM), Multi Crew Cooperation (MCC) and Crew Resource Management (CRM), and be able to relate practical applications of TEM, MCC and CRM;
- (b) learns the techniques of briefing and debriefing and be able to facilitate effective learning for the students;
- (c) learns how to analyse problems and synthesise them into practical solutions for the students; and
- (d) learns how to write the student's report precisely and accurately.

- 2.3.3 The training should be conducted in no less than five days, consisting of at least the following:

- (a) Lectures and discussion topics:
 - (i) Human factors and limitations
 - (ii) Threat and Error Management
 - (iii) Multi Crew Cooperation
 - (iv) Crew Resource Management

- (b) Exercises and tutorials:
 - (i) Prepare resources
 - (ii) Create climate conducive to learning
 - (iii) Present knowledge
 - (iv) Manage time
 - (v) Facilitate learning
 - (vi) Conduct briefing and debriefing
 - (vii) Assess performance
 - (viii) Monitor and review progress
 - (ix) Write reports

2.4 Part B - Handling, Demonstration and Take-Over Skills

2.4.1 The aim of Part B of the FI (Type Rating) course is to ensure the instructor is able to:

- (a) demonstrate and teach flying skills and techniques to the student from either pilot's seat; and
- (b) take-over appropriately from the student as if it was an actual aircraft flight.

2.4.2 For initial appointment, there should be a minimum of two 4-hour sessions to train and assess the instructor on the applicable aircraft (simulator) type. By the end of these sessions, the instructor should be able to:

- (a) demonstrate competent flying skills in normal and abnormal flight conditions on each pilot's seat;
- (b) instruct flying maneuvers and techniques on each pilot's seat; and
- (c) be aware of the appropriate time to take over controls: not too early which may deprive the trainee of his learning opportunity yet not too late as to jeopardize the safety of the flight.

2.4.3 The instructor's training should be discontinued if he or she is found to be weak in his judgment during the critical phases of flight.

2.5 Part C - Simulator Instructional Practice to Proficiency

2.5.1 The aim of Part C of the FI (Type Rating) course is to ensure the instructor is:

- (a) knowledgeable with the aircraft systems and its performance, normal and abnormal procedures;
- (b) able to make use of the simulator as a teaching tool through practicing of simulator instructional techniques and skills; and
- (c) capable of tailoring instructions according to each student's proficiency level (Tutoring skills).

2.5.2 To achieve the aim of this part the applicant should conduct at least five 4-hour simulator sessions. Each session is to include the briefing, conduct of session, debriefing and report writing. The tutors may act as "students" and provide critique after each session. Appropriate intervention by tutors as "students" to demonstrate how it should be done, during the conduct of the session, is permissible. The tutors must at least be an FI qualified on the aircraft type.

2.5.3 The exercises chosen for the sessions are to be from the Type Rating training syllabus with at least one exercise on the demonstration and teaching of correct crosswind take-off and landing.

2.5.4 Part C (* in table under paragraph 2.2) may be abbreviated to two 4-hour sessions if the applicant is currently a qualified FI on another aircraft type; or if his or her FI rating had lapsed by less than two years on the applicable aircraft type.

2.6 Flying Instructor (Type Rating) Test

2.6.1 The aim of this test is to assess if the instructor meets the standards required for the holder of an FI rating. The instructor is also expected to demonstrate the skills covered under Part B.

2.6.2 This should be a 4-hour simulator session on two “students”. It should be a training detail from the Type Rating syllabus. The “students” may be actual students on a Type Rating course or tutors acting as “students”. This session must be evaluated by an AFE as a test to assess if the instructor is competent to be issued an FI (Type Rating).

2.6.3 An FI whose FI Rating lapsed for a period of not more than 3 months may not need to complete any training programme before taking the FI Rating Test.

3 THE AFI/FI (SINGLE PILOT) COURSE

3.1 Depending on the experience level of the candidate or period of lapse of the instructor rating, the applicant may not be required to complete certain components of the AFI/ FI training course. The required AFI/ FI training to be completed is as indicated in the table below.

Qualification \ Training Required	No AFI/ FI experience or AFI/ FI Rating lapsed >2 years	AFI/ FI Rating lapsed >3 months but ≤2 years)	Current AFI/ FI adding new aircraft type	Addition of Training Authorisation / Lifting of Limitations
Instructor-Seat Conversion	Yes	No	Yes	No
Instructor Development	Yes	No	No	No
Mass Brief (Demo/ Practice/ Readback)	Yes	Yes*	No	Yes*
Pre-Flight Brief (Demo/ Practice/ Readback)	Yes	Yes*	No**	Yes*
Flight Pattern (Instruction/ Practice/ Feedback)	Yes	Yes*	No**	Yes*

* Training may be consolidated for candidates with acceptable instructing experience

**Training may still be required depending on the complexity of the new aircraft type

3.2 An AFI/ FI whose AFI/ FI Rating lapsed for a period of not more than 3 months may not need to complete any training before taking the AFI/ FI Rating Test.

4 RENEWAL OF THE AFI/FI RATING (SINGLE PILOT) IF INSTRUCTOR IS 65 YEARS OF AGE OR OLDER

- 4.1 An instructor who holds an FI rating (single pilot) and is 65 years of age or older is required to renew his FI rating (single pilot) annually, as the validity of the FI rating is reduced to 12 months. The renewal requirements for the AFI/ FI rating (single pilot) are the same regardless of the age of the instructor.

5 RENEWAL OF THE CPL/ATPL FROM 65 YEARS FOR HOLDERS OF THE AFI/FI RATING (SINGLE PILOT)

- 5.1 Pursuant to paragraphs 20(1A)(b), (2A)(c) and (2A)(d) of the ANO, renewal of a CPL/ ATPL for a holder who is 65 years of age or older is permitted for the purpose of giving flying instruction on a single pilot certificated aircraft. A pilot who is 65 years of age or older wishing to apply for the renewal of his or her CPL/ ATPL in order to give flying instruction on single pilot certificated aircraft should submit an application with evidence that he or she:

- (a) meets the Class 1 medical requirements;
- (b) possesses a valid AFI/ FI Rating to conduct training on a single pilot certificated aircraft; and
- (c) continues to be employed as a flying instructor with the sponsoring Aviation Training Organisation (ATO) or Flying Club. Acceptable documents include an employment letter from the ATO or Flying Club declaring that he or she is currently or will be employed to teach as a flying instructor.

- 5.2 The applicant is expected to maintain his or her AFI/ FI rating (single pilot) in order to renew his or her CPL/ ATPL if he or she is 65 years of age or older. In the event that the AFI/ FI rating has lapsed, the CPL/ ATPL may be renewed as a one-off to allow the applicant to reactivate the lapsed AFI/ FI rating.