



Circulaire

CIR/FCL 17

Date : 01/2009
Datum

Edition : 4
Uitgave

Objet : La qualification TRI(A)

Réf. :

Arrêté royal du 4 mars 2008 réglementant les licences civiles de pilote d'avions. Art. 84.

JAR-FCL 1.365
App. 1 to JAR-FCL 1.365
AMC-FCL 1.365

Betreft: De bevoegdverklaring TRI(A)

Ref. :

Koninklijk besluit van 4 maart 2008 tot regeling van de burgerlijke vergunningen van bestuurder van vliegtuigen. Art. 84.

JAR-FCL 1.365
App. 1 to JAR-FCL 1.365
AMC-FCL 1.365

Le Directeur général a.i.,
De Directeur-generaal a.i.,

L'édition 4 comprend
De 4^{de} uitgave bevat

Frank DURINCKX

7 pages datées : 01/2009
blz. gedagtekend

FCL 17

Cette circulaire décrit le cours de formation en vue de l'obtention de la qualification d'instructeur de qualification de type TRI(A).

FCL 17

Deze circulaire beschrijft de opleidingscursus voor het bekomen van de bevoegdverklaring van instructeur voor een typebevoegdverklaring TRI(A).

Appendix 1 to JAR-FCL 1.365

Course for the type rating instructor rating for multi-pilot aeroplane (TRI) (MPA)

(See JAR-FCL 1.365)

(See AMC FCL 1.365)

COURSE OBJECTIVE

1 The aim of the TRI(A) course is to train aeroplane licence holders with more than 1 500 hours as pilots of multi-pilot aeroplanes to the level of proficiency necessary for the issue of a TRI(A) rating. The course shall be designed to give adequate training to the applicant in theoretical knowledge instruction, flight instruction and synthetic flight instruction in order to instruct for any multi-pilot aeroplane type rating for which the applicant is qualified (see JAR-FCL 1.365).

TEACHING AND LEARNING

2 The syllabus is set out in AMC FCL 1.365. An approved TRI(A) Teaching and Learning course shall comprise not less than 25 hours. Pilots holding or having held one of the following ratings are credited for the TRI(A) Teaching and Learning part of the TRI course:

FI(A), CRI(A), IRI(A)

FI(H), TRI(H), IRI(H), SFI(H)

FLIGHT TRAINING

3 The flight training syllabus is set out in AMC FCL 1.365.

AMC FCL 1.365

Course for the type rating instructor rating for multi-pilot (aeroplane) (TRI)(MPA)

(See JAR-FCL 1.365)

(See Appendix 1 to JAR-FCL 1.365)

COURSE OBJECTIVE

1 The course should be designed to give adequate training to the applicant in theoretical knowledge instruction, flight instruction and synthetic flight instruction in order to instruct for any multi-pilot aeroplane type rating for which the applicant is qualified (see art. 85 of Royal Decree of 4 March 2008 - JAR-FCL 1.365).

PART 1

TEACHING AND LEARNING

Item No.

1 THE LEARNING PROCESS

Motivation
Perception and understanding
Memory and its application
Habits and transfer
Obstacles to learning
Incentives to learning
Learning methods
Rates of learning

2 THE TEACHING PROCESS

Elements of effective teaching
Planning of instructional activity
Teaching methods
Teaching from the 'known' to the 'unknown'
Use of 'lesson plans'

3 TRAINING PHILOSOPHIES

Value of a structured (approved) course of training
Importance of a planned syllabus
Integration of theoretical knowledge and flight instruction

4 TECHNIQUES OF APPLIED INSTRUCTION

- a. Theoretical knowledge – Classroom instruction techniques
 - Use of training aids
 - Group lectures
 - Individual briefings
 - Student participation/discussion
- b. FLIGHT – Airborne instruction techniques
 - The flight/cockpit environment
 - Techniques of applied instruction
 - Post flight and inflight judgement and decision making

5 STUDENT EVALUATION AND TESTING

a. Assessment of student performance

The function of progress tests
Recall of knowledge
Translation of knowledge into understanding
Development of understanding into actions
The need to evaluate rate of progress

b. Analysis of student errors

Establish the reason for errors
Tackle major faults first, minor faults second
Avoidance of over criticism
The need for clear concise communication

6 TRAINING PROGRAMME DEVELOPMENT

Lesson planning
Preparation
Explanation and demonstration
Student participation and practice
Evaluation

7 HUMAN PERFORMANCE AND LIMITATIONS RELEVANT TO FLIGHT INSTRUCTION

Physiological factors
Psychological factors
Human information processing
Behavioural attitudes
Development of judgement and decision making

8 HAZARDS INVOLVED IN SIMULATING SYSTEMS FAILURES AND MALFUNCTIONS IN THE AEROPLANE DURING FLIGHT

Selection of a safe altitude
Importance of 'touch drills'
Situational awareness
Adherence to correct procedures

9 TRAINING ADMINISTRATION

Flight theoretical knowledge instruction records
Pilot's personal flying log book
The flight/ground curriculum
Study material
Official forms
Aircraft Flight/Owner's Manuals/Pilot's Operating Handbooks
Flight authorisation papers
Aircraft documents
The private pilot's licence regulations

PART 2

TECHNICAL TRAINING

- 1 The course should be related to the type of aeroplane on which the applicant wishes to instruct. A training programme should give details of all theoretical knowledge instruction.
- 2 Identification and application of human factors (as set in the ATPL syllabus 040) related to multi-crew co-operation aspects of the training.
- 3 The content of the instruction programme should cover training exercises as applicable to the aeroplane type.
- 4 The TRI rating applicant should be taught and made familiar with giving instruction from the seat normally occupied by the co-pilot.

Training Exercises

5 Flight Simulator

Items with an * should be performed in an aeroplane in case a flight simulator is not available.

- a. use of checklist, setting of radios/navigation aids;
- b. starting engines;
- c.* take-off checks;
- d.* instrument take-off, transition to instruments after lift off;
- e. crosswind take-off;
- f. engine failure during take-off between V_1 and V_2 ;
- g. aborted take-off prior to reaching V_1 ;
- h. high mach buffeting, specific flight characteristics (if necessary);
- i.* steep turns;
- j.* recovery from approach to stall/take-off, clean, landing configuration;
- k. instrument approach to required minimum decision height or minimum descent height/altitude, manual one engine simulated inoperative during approach and landing or go around;
- l. rejected landing and go around; and
- m. crosswind landing.

Category II and III operations, if applicable

- 6
 - a. precision approaches, automatic with auto-throttle and flight director go-around caused by aircraft or ground equipment deficiencies;
 - b. go around caused by weather conditions;
 - c. go around at DH caused by offset position from centreline; and
 - d. one of the CAT II/CAT III approaches must lead to a landing.

Aeroplane (not applicable for applicants for SFI(A) authorisation or zero flight time training by a TRI(A))

- 7
 - a. familiarisation with controls during outside checks;
 - b. use of checklist, setting of radios and navigation aids, starting engines;
 - c. taxiing;
 - d. take-off;
 - e. engine failure during take-off shortly after V_2 , after reaching climb out attitude;
 - f. other emergency procedures (if necessary);
 - g. one engine simulated inoperative go around from required minimum DH; and
 - h. one engine (critical) simulated inoperative landing.

- 8 Flight simulator qualified and approved for ZFTT (for restricted TRI(A))
- a. familiarisation with controls during outside checks;
 - b. use of checklist, setting of radios and navigation aids, starting engines;
 - c. taxiing;
 - d. take-off;
 - e. simulated engine failure during take-off shortly after V_2 , after reaching climb out attitude;
 - f. other emergency procedures (if necessary);
 - g. one engine inoperative go around from requirement minimum DH; and
 - h. one engine (critical) inoperative landing.