

## AMC1 FCL.915(e) General prerequisites and requirements for instructors

*ED Decision 2019/005/R*

### **ADDITIONAL REQUIREMENTS FOR INSTRUCTING IN A TRAINING COURSE IN ACCORDANCE WITH FCL.745.A — GENERAL**

- (a) The objective of the course required by point [FCL.915\(e\)\(1\)](#) is to train instructors to deliver training on the advanced UPRT course according to point [FCL.745.A](#) using the train-to-proficiency concept.
- (b) Training should be both theoretical and practical. Practical elements should include the development of specific instructor skills, particularly in the area of teaching upset recovery techniques and strategies, whilst exploring the associated physiological and psychological aspects.
- (c) Within 6 months preceding the start of the course, the instructor should have completed a pre-course assessment with an instructor holding the privilege in accordance with [FCL.915\(e\)\(1\)](#) to assess their ability to undertake the course.
- (d) The training course should comprise:
  - (1) theoretical knowledge instruction on the theoretical knowledge elements presented in the advanced UPRT course and the additional elements required for an instructor to deliver effective training;
  - (2) flight instruction on the exercises used in the advanced UPRT course; and
  - (3) flight instruction on recovery from upsets that could result from students mis-handling the aircraft during the advanced UPRT course including spin recovery.
- (e) The content of the theoretical knowledge and flight instruction should be tailored to the competence of the applicant as demonstrated during both pre-course and continuous assessment.
- (f) Successful completion of the course requires that the instructor:
  - (1) demonstrates the resilience to be able to recover from any feasible upset in the aircraft to be used for training;
  - (2) demonstrates the ability to provide instruction to achieve the objectives of the advanced UPRT course to a wide range of trainees; and
  - (3) manages the physiological and psychological well-being of students during training.
- (g) The instructor should be issued with a certificate following successful completion of the course.

## AMC2 FCL.915(e) General prerequisites and requirements for instructors

*ED Decision 2019/005/R*

### ADDITIONAL REQUIREMENTS FOR INSTRUCTING IN A TRAINING COURSE IN ACCORDANCE WITH FCL.745.A – SYLLABUS

The following tables contain theoretical knowledge (Table 1) and practical training exercises (Table 2) that should be taught in the context of the advanced UPRT course as per point [FCL.745.A](#).

**TABLE 1: THEORETICAL KNOWLEDGE**

1.	Completion of a flight risk assessment
2.	Resilience-building strategies, managing startle and surprise
3.	The limitations and type-specific characteristics of the aeroplane used for training
4.	The importance of adhering to the scenarios that have been validated by the training programme developer
5.	Instructor techniques to induce and manage startle and surprise
6.	Upset recognition and recovery strategies
7.	Disorientation
8.	Distraction
9.	Immediate recognition of student pilot errors
10.	Intervention strategies
11.	Delivery of the theoretical knowledge instruction of the advanced UPRT course

**TABLE 2: PRACTICAL TRAINING EXERCISES**

#### SECTION 1 — PRE-FLIGHT PREPARATION

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|-----|---|
| 1.1 | Correct completion of a flight risk assessment (such as weather, terrain, traffic density, student's experience level and capabilities) |
| 1.2 | Safety briefing   |

#### SECTION 2 — FLIGHT

- |      |   |
|------|---|
| 2.1  | Selection of suitable airspace for the conduct of recovery exercises  |
| 2.2  | Accurate execution of all of the manoeuvres required for the advanced UPRT course   |
| 2.3. | Recovery from upsets that could result from the student or instructor mishandling the aeroplane including: <ul style="list-style-type: none"> <li>– timely and appropriate intervention;</li> <li>– accelerated stall;</li> <li>– secondary stall;</li> <li>– incipient spin;</li> <li>– fully developed spin; and</li> <li>– Spiral dive.</li> </ul> |
| 2.4  | Delivery of all of the training exercises in the advanced UPRT course   |
| 2.5  | Anticipating and immediately recognising incorrect student inputs which might exceed aeroplane limitations and acting swiftly and appropriately to maintain the necessary margins of safety   |
| 2.6  | Exercises to surprise the student   |
| 2.7  | Adapt the training programme to take account of the physiological and psychological state of the student  |
| 2.8  | Ensure the safety of the operation during training by maintaining awareness of the operating environment  |
| 2.9  | Assess the competence of the student  |

**SECTION 3 — POST-FLIGHT**

- |     |   |
|-----|---|
| 3.1 | Provide effective instructor feedback to the student and plan subsequent training details |
| 3.2 | Avoid negative transfer of training   |

## GM1 FCL.915(e) General prerequisites and requirements for instructors

*ED Decision 2019/005/R***TRAINING ON SPIN AVOIDANCE AND SPIN RECOVERY**

- (a) While the purpose of advanced UPRT course is to expose students to psychological and physiological effects, students' responses and actions on controls may take any conceivable variations, including some which can initiate spin entry or, most importantly, can highly aggravate the upset or loss-of-control they are supposed to recover from.
- (b) The advanced UPRT course in accordance with point [FCL.745.A](#) is not aerobatic training and only requires training for the incipient spin as well as uncoordinated side slipped stalls which are prone to initiating spins. Full spin training or the development of spin recovery proficiency is reserved for the training course in accordance with point [FCL.915\(e\)](#).
- (c) Even though most flights will go exactly as planned without an unanticipated departure from controlled flight, the instructor is responsible for the safety of flight despite anomalies or unexpected student inputs.
- (d) Even in a case where an aeroplane is not certified for intentional flat or aggravated or inverted spins, it does not mean that mishandled student recovery avoids placing the aeroplane in such a situation. Some student inputs will take the aeroplane uncontrolled far beyond the normal scope of the aerobatic rating as defined in point [FCL.800](#). Those situations might also have the potential to draw the aeroplane outside its certified flight envelope (e.g. overloads, snap-roll departures above limit speed, spin or inverted spin when not certified for, flat spins, etc.). Most importantly, those resulting situations could startle the instructor.
- (e) For the reasons specified in point (d), instructors should:
  - (1) be trained to the extent of proficiency on the specific type of aircraft they use to deliver the course;
  - (2) have academic understanding of the factors assisting or deterring spin recoveries (upright and inverted spins), altitude requirements for safe recovery margins, and other operational considerations;
  - (3) demonstrate that they have the ability to early recognise abnormal situations, timely take action, and safely recover from all the conditions that they may encounter in the delivery of training; and
  - (4) demonstrate their ability to recover from all spin types, not only from spins entered intentionally, but from spins of unannounced direction of autorotation, and from all potential spin variations, including:
    - (i) normal (non-aggravated) spins;
    - (ii) flat spins;
    - (iii) accelerated spins; and
    - (iv) transition spins (incorrect recovery resulting in reversal of rotation).

- (f) In the context of points (d) and (e), it is recommended that candidates either hold an aerobatic rating for aeroplanes or have equivalent experience.

## AMC1 FCL.915(e)(2) General prerequisites and requirements for instructors

*ED Decision 2019/005/R*

### CONTENT OF THE REFRESHER TRAINING FOR UPRT INSTRUCTIONAL PRIVILEGES

- (a) The objective of the refresher training is for the instructor to maintain or to re-obtain, as applicable, the level of competence required for instructing on a training course as per point [FCL.745.A](#).
- (b) The content of the refresher training should:
- (1) consist of elements from the initial UPRT instructor training course as per point [FCL.915\(e\)\(1\)\(ii\)](#); and
  - (2) be determined by the ATO on a case-by-case basis, considering the needs of the individual instructor and taking into account the following factors:
    - (i) the experience of the instructor;
    - (ii) the amount of time elapsed since the instructor provided instruction on a training course as per point [FCL.745.A](#) for the last time; and
    - (iii) the performance of the instructor during a simulated UPRT training session comprising exercises from the advanced UPRT course as per point [FCL.745.A](#). During this simulated training session, another instructor qualified in accordance with point [FCL.915\(e\)](#) should play the role of the student on the advanced UPRT course.
- (c) Taking into account the factors listed in (b)(2) above, the ATO may also count the simulated training session as per point (b)(2)(iii) as refresher training without the need for further refresher training sessions, provided that the instructor demonstrates that he or she already possesses the required level of competence.
- (d) The completion of the refresher training should be entered in the logbook of the instructor and should be signed by the head of training of the ATO.

## FCL.920 Instructor competencies and assessment

*Regulation (EU) No 1178/2011*

All instructors shall be trained to achieve the following competences:

- Prepare resources,
- Create a climate conducive to learning,
- Present knowledge,
- Integrate Threat and Error Management (TEM) and crew resource management,
- Manage time to achieve training objectives,
- Facilitate learning,
- Assess trainee performance,