AMC1 UAS.OPEN.030(2)(b) UAS operations in subcategory A2

PRACTICAL SELF-TRAINING

(a) The aim of the practical self-training is to ensure that the remote pilot should be able to demonstrate at all times the ability to:

(1) operate a class C2 UAS within its limitations;

(2) complete all manoeuvres with smoothness and accuracy;

(3) exercise good judgment and airmanship;

(4) apply their theoretical knowledge; and

(5) maintain control of the UA at all times in such a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(b) The remote pilot should complete the practical self-training with a UAS that features the same flight characteristics (e.g. fixed wing, rotorcraft), control scheme (manual or automated, human machine interface) and a similar weight as the UAS intended for use in the UAS operation. This implies the use of a UA with an MTOM of less than 4 kg and bearing the Class 2 CE marking after the transition period relative to CE marking is closed.

(c) If a UAS with both manual and automated control schemes is used, the practical self-training should be performed with both control schemes. If this UAS has multiple automated features, the remote pilot should demonstrate proficiency with each automated feature.

(d) The practical self-training should contain at least flying exercises regarding take-off or launch and landing or recovery, precision flight manoeuvres remaining in a given airspace volume, hovering in all orientations or loitering around positions when applicable. In addition, the remote pilot should exercise procedures for abnormal situations (e.g. a return-to-home function, if available), as stipulated in the user's manual provided by the manufacturer.

AMC2 UAS.OPEN.030(2)(b) UAS operations in subcategory A2

PRACTICAL COMPETENCIES FOR PRACTICAL SELF-TRAINING

When executing the practical self-training, the remote pilot should perform as many flights as they deem necessary to gain a reasonable level of knowledge and the skills to operate the UAS.

The following list of practical competencies should be considered:

(a) Preparation of the UAS operation:

(1) make sure that the:

(i) chosen payload is compatible with the UAS used for the UAS operation;

(ii) zone of UAS operation is suitable for the intended operation; and

(iii) UAS meets the technical requirements of the geographical zone;

(2) define the area of operation in which the intended operation takes place in accordance with UAS.OPEN.040;

(3) define the area of operation considering the characteristics of the UAS;

(4) identify the limitations published by the MS for the geographical zone (e.g. no-fly zones, restricted zones and zones with specific conditions near the operation zone), and if needed, seek authorisation by the entity responsible for such zones;

(5) identify the goals of the UAS operation;

(6) identify any obstacles and the potential presence of uninvolved persons in the area of operation that could hinder the intended UAS operation; and

(7) check the current meteorological conditions and the forecast for the time planned for the operation.

(b) Preparation for the flight:

(1) assess the general condition of the UAS and ensure that the configuration of the UAS complies with the instructions provided by the manufacturer in the user's manual;

(2) ensure that all removable components of the UA are properly secured;

(3) make sure that the software installed on the UAS and on the remote pilot station (RPS) is the latest published by the UAS manufacturer;

(4) calibrate the instruments on board the UA, if needed;

(5) identify possible conditions that may jeopardise the intended UAS operation;

(6) check the status of the battery and make sure it is compatible with the intended UAS operation;

(7) update the geo-awareness system; and

(8) set the height limitation system, if needed.

(c) Flight under normal conditions:

(1) using the procedures provided by the manufacturer in the user's manual, familiarise with how to:

(i) take off (or launch);

(ii) make a stable flight:

(A) hover in case of multirotor UA;

(B) perform coordinated large turns;

(C) perform coordinated tight turns;

(D) perform straight flight at constant altitude;

(E) change direction, height and speed;

(F) follow a path;

(G) return of the UA towards the remote pilot after the UA has been placed at a distance that no longer allows its orientation to be distinguished, in case of multirotor UA;

(H) perform horizontal flight at different speed (critical high speed or critical low speed), in case of fixed wing UA;

(iii) keep the UA outside no-fly zones or restricted zones, unless holding an authorisation;

(iv) use some external references to assess the distance and height of the UA;

(v) perform return to home procedure — automatic or manual;

(vi) land (or recovery); and

(vii) perform landing procedure and missed approach in case of fixed wing UA; and

(2) maintain a sufficient separation from obstacles;

(d) Flight under abnormal conditions:

(i) manage the UAS flight path in abnormal situations;

(ii) manage a situation when the UAS positioning equipment is impaired;

(iii) manage a situation of incursion of a person into the area of operation, and take appropriate measures to maintain safety;

(iv) manage the exit from the operation zone as defined during the flight preparation;

(v) manage the incursion of a manned aircraft nearby the area of operation;

(vi) manage the incursion of another UAS in the area of operation;

(vii) select the safeguard mechanism relevant to a situation;

(viii) deal with a situation of a loss of attitude or position control generated by external phenomena;

(ix) resume manual control of the UAS when automatic systems render the situation dangerous; and

(x) carry out the loss of link procedure.

(e) Briefing, debriefing and feedback:

(i) conduct a review of the UAS operation; and

(ii) identify situations when an occurrence report is necessary and complete the occurrence report.