

Annex VII to ED Decision 2022/005/R**‘AMC and GM to Annex VII (Part-NCO) to Commission Regulation (EU) No 965/2012 —
Issue 2, Amendment 12’**

The text of the amendment is arranged to show deleted, new or amended text as shown below:

- deleted text is ~~struck through~~;
- new or amended text is highlighted in **blue**;
- an ellipsis ‘[...]’ indicates that the rest of the text is unchanged.

Note to the reader

In amended, and in particular in existing (that is, unchanged) text, ‘Agency’ is used interchangeably with ‘EASA’. The interchangeable use of these two terms is more apparent in the consolidated versions. Therefore, please note that both terms refer to the ‘European Union Aviation Safety Agency (EASA)’.

The Annex to Decision 2014/016/R of 24 April 2014 of the Executive Director of the Agency is amended as follows:

AMC1 NCO.GEN.105(ea)(3) Pilot-in-command responsibilities and authority**CHECKLISTS**

- (a) The pilot-in-command should use the latest checklists provided by the manufacturer.
- (b) If checks conducted prior to take-off are suspended at any point, the pilot-in-command should **restart** ~~re-start~~ them from a safe point prior to the interruption.

GM1 NCO.OP.105 Specification of isolated aerodromes — aeroplanes**USE OF AN AERODROME AS AN ISOLATED AERODROME**

The concept of an isolated aerodrome allows the operator to use aerodromes that would otherwise be impossible or impractical to use with sufficient fuel/energy to fly to the destination aerodrome and then to a destination alternate aerodrome, provided that operational criteria are used to ensure a safe-landing option, for example by specifying a point of no return (PNR). If alternate fuel/energy is carried, the operator is not required to consider the aerodrome isolated and use the aforementioned operational criteria.

AMC1 NCO.OP.125(b) Fuel/energy and oil supply — aeroplanes and helicopters**PLANNING CRITERIA — FINAL RESERVE FUEL/ENERGY**

The final reserve fuel (FRF)/energy should be no less than the required fuel/energy to fly:

(a) for aeroplanes:

- (1) for 10 minutes at maximum continuous cruise power at 1 500 ft (450 m) above the destination under VFR by day, taking off and landing at the same aerodrome/landing site, and always remaining within sight of that aerodrome/landing site;
- (2) for 30 minutes at holding speed at 1 500 ft (450 m) above the destination under VFR by day; and
- (3) for 45 minutes at holding speed at 1 500 ft (450 m) above the destination or destination alternate aerodrome under VFR flights by night and IFR; and

(b) for helicopters:

- (1) for 10 minutes at best-range speed under VFR by day, taking off and landing at the same aerodrome/landing site, and always remaining within 25 NM of that aerodrome/landing site, when needed for the purpose of specialised operations;
- (2) for 20 minutes at best-range speed for other VFR flights; and
- (3) for 30 minutes at holding speed at 1 500 ft (450 m) above the destination or destination alternate aerodrome under IFR.

AMC2 NCO.OP.125(b) Fuel/energy and oil supply — aeroplanes and helicopters**FINAL RESERVE FUEL/ENERGY**

The quantity of the FRF/energy should be planned before flight and be an easily recalled figure against which the pilot-in-command can assess the current fuel/energy state of the aircraft.

AMC3 NCO.OP.125(b) Fuel/energy and oil supply — aeroplanes and helicopters**FINAL RESERVE FUEL/ENERGY PROTECTION**

The planned FRF/energy should be protected as a reserve in normal operations. If the fuel/energy on board falls below the FRF/energy, the pilot-in-command should consider this to be an emergency. The FRF/energy should not be used as contingency fuel in normal operations.

When the FRF/energy can no longer be protected, then a fuel/energy emergency should be declared and any landing option explored, including deviating from rules, operational procedures, and methods in the interest of safety (as per point CAT.GEN.MPA.105(b)).

GM1 NCO.OP.125(b) Fuel/energy and oil supply — aeroplanes and helicopters**LIKELIHOOD OF UNEXPECTED CIRCUMSTANCES TO INCREASE WITH FLIGHT DURATION**

The likelihood of unexpected circumstances arising after the aircraft is fuelled may increase with the duration of the planned flight (for example, during a long flight, a problem at the destination aerodrome or operating site is more likely to have occurred than during a short local flight).

GM2 NCO.OP.125(b) Fuel/energy and oil supply — aeroplanes and helicopters**PLANNING of FUEL/ENERGY QUANTITY — HOLDING**

When planning the fuel/energy quantity, in case of holding, and if the aircraft documentation does not provide approved data for the holding regime, the pilot should derive the fuel/energy flow data from the long-range/best-range cruise data or, if this is not provided, from the lowest available cruise data in power setting tables.

AMC1 NCO.OP.147 Refuelling with the engine(s) running and/or rotors turning — helicopters**CHECKLIST — HELICOPTERS**

- (a) Before commencing a refuelling with rotors turning, the pilot-in-command should conduct a risk assessment, assessing the complexity of the activity in order to determine the hazards and associated risks inherent in the operation, and establish mitigating measures.
- (b) Refuelling with rotors turning should be performed in accordance with a checklist. Based on the risk assessment, the pilot-in-command should establish a checklist appropriate to the activity and aircraft used, taking into account this AMC.
- (c) The checklist should cover relevant elements of GM1 NCO.SPEC.105.
- (d) The checklist that is relevant to the duties of the pilot-in-command, crew members, and task specialists should be readily accessible.
- (e) The checklist should be regularly reviewed and updated, as appropriate.

GM1 NCO.OP.147 Refuelling with the engine(s) running and/or rotors turning — helicopters**PROCEDURES— HELICOPTERS**

AMC1 SPO.OP.157 and GM1 SPO.OP.157 provide a generic framework for the development of standard operating procedures (SOPs) for refuelling with the rotors turning.

GM1 NCO.OP.185(b)&(c) In-flight fuel/energy management**'MINIMUM FUEL' DECLARATION**

- (a) The pilot-in-command may consider reporting the remaining fuel/energy endurance after a 'MINIMUM FUEL' or 'MAYDAY MAYDAY MAYDAY FUEL' declaration.

Note: For Part-NCO operators, the FRF/energy varies; therefore, the ATC may not be aware of the amount of the remaining fuel/energy endurance.

- (b) The 'MINIMUM FUEL' declaration informs the ATC that all planned landing options have been reduced to a specific aerodrome or operating site of intended landing, and that for helicopters, no other landing site is available. It also informs the ATC that any change to the existing clearance may result in landing with less than the planned FRF/energy. This is not an emergency situation but an indication that an emergency situation is possible, should any additional delay occur.

The pilot should not expect any form of priority handling as a result of a 'MINIMUM FUEL' declaration. However, the ATC should advise the flight crew of any additional expected delays, as well as coordinate with other ATC units when transferring the control of the aircraft, to ensure that the other ATC units are aware of the flight's fuel/energy state.

- (c) The requirement for declaring 'MINIMUM FUEL' and 'MAYDAY MAYDAY MAYDAY FUEL' applies only to controlled flights; however, these declarations may also be made during uncontrolled flights if the pilot-in-command considers this advisable.