

Subpart TC – Technical crew member in HEMS, HHO or NVIS operations

GM1 ORO.TC.105 Conditions for assignment to duties

GENERAL

- (a) The technical crew member in HEMS, HHO or NVIS operations should undergo an initial medical examination or assessment and, if applicable, a re-assessment before undertaking duties.
- (b) Any medical assessment or re-assessment should be carried out according to best aero-medical practice by a medical practitioner who has sufficient detailed knowledge of the applicant's medical history.
- (c) The operator should maintain a record of medical fitness for each technical crew member.
- (d) Technical crew members should:
 - (1) be in good health;
 - (2) be free from any physical or mental illness that might lead to incapacitation or inability to perform crew duties;
 - (3) have normal cardio-respiratory function;
 - (4) have normal central nervous system;
 - (5) have adequate visual acuity 6/9 with or without glasses;
 - (6) have adequate hearing; and
 - (7) have normal function of ear, nose and throat.

AMC1 ORO.TC.110 Training and checking

GENERAL

- (a) Elements of training that require individual practice may be combined with practical checks.
- (b) The checks should be accomplished by the method appropriate to the type of training including:
 - (1) practical demonstration;
 - (2) computer-based assessment;
 - (3) in-flight checks; and/or
 - (4) oral or written tests.

AMC1 ORO.TC.115 Initial training

ELEMENTS

- (a) The elements of initial training mentioned in ORO.TC.115 should include in particular:
 - (1) General theoretical knowledge on aviation and aviation regulations relevant to duties and responsibilities:
 - (i) the importance of crew members performing their duties in accordance with the operations manual;
 - (ii) continuing competence and fitness to operate as a crew member with special regard to flight and duty time limitations and rest requirements;

- (iii) an awareness of the aviation regulations relating to crew members and the role of the competent and inspecting authority;
- (iv) general knowledge of relevant aviation terminology, theory of flight, passenger distribution, meteorology and areas of operation;
- (v) pre-flight briefing of the crew members and the provision of necessary safety information with regard to their specific duties;
- (vi) the importance of ensuring that relevant documents and manuals are kept up-to-date with amendments provided by the operator;
- (vii) the importance of identifying when crew members have the authority and responsibility to initiate an evacuation and other emergency procedures; and
- (viii) the importance of safety duties and responsibilities and the need to respond promptly and effectively to emergency situations.

(2) Fire and smoke training:

- (i) reactions to emergencies involving fire and smoke and identification of the fire sources;
- (ii) the classification of fires and the appropriate type and techniques of application of extinguishing agents, the consequences of misapplication, and of use in a confined space; and
- (iii) the general procedures of ground-based emergency services at aerodromes.

(3) When conducting extended overwater operations, water survival training, including the use of personal flotation equipment.

(4) Before first operating on an aircraft fitted with life-rafts or other similar equipment, training on the use of this equipment, including practice in water.

(5) Survival training appropriate to the areas of operation, (e.g. polar, desert, jungle, sea or mountain).

(6) Aero-medical aspects and first aid, including:

- (i) instruction on first aid and the use of first-aid kits; and
- (ii) the physiological effects of flying.

(7) Effective communication between technical crew members and flight crew members including common language and terminology.

(8) Relevant CRM elements of AMC1 and AMC1.1 ORO.FC.115&.215.

AMC1 ORO.TC.120&.125 Operator conversion training and differences training

ELEMENTS

(a) Operator conversion training mentioned in ORO.TC.120 (b) and differences training mentioned in ORO.TC.125 (a) should include the following:

(1) Fire and smoke training, including practical training in the use of all fire fighting equipment as well as protective clothing representative of that carried in the aircraft. Each technical crew member should:

- (i) extinguish a fire characteristic of an aircraft interior fire except that, in the case of Halon extinguishers, an alternative extinguishing agent may be used; and
- (ii) practise the donning and use of protective breathing equipment (when fitted) in an enclosed, simulated smoke-filled environment.

(2) Practical training on operating and opening all normal and emergency exits for passenger evacuation in an aircraft or representative training device and demonstration of the operation of all other exits.

(3) Evacuation procedures and other emergency situations, including:

- (i) recognition of planned or unplanned evacuations on land or water - this training should include recognition of unusable exits or unserviceable evacuation equipment;
- (ii) in-flight fire and identification of fire source; and
- (iii) other in-flight emergencies.

(4) When the flight crew is more than one, training on assisting if a pilot becomes incapacitated, including a demonstration of:

- (i) the pilot's seat mechanism;
- (ii) fastening and unfastening the pilot's seat restraint system;
- (iii) use of the pilot's oxygen equipment, when applicable; and
- (iv) use of pilots' checklists.

(5) Training on, and demonstration of, the location and use of safety equipment including the following:

- (i) life-rafts, including the equipment attached to, and/or carried in, the raft, where applicable;
- (ii) life-jackets, infant life-jackets and flotation devices, where applicable;
- (iii) fire extinguishers;
- (iv) crash axe or crow bar;
- (v) emergency lights including portable lights;
- (vi) communication equipment, including megaphones;
- (vii) survival packs, including their contents;
- (viii) pyrotechnics (actual or representative devices);
- (ix) first-aid kits, their contents and emergency medical equipment; and
- (x) other safety equipment or systems, where applicable.

(6) Training on passenger briefing/safety demonstrations and preparation of passengers for normal and emergency situations.

(7) Training on the use of dangerous goods, if applicable.

(8) Task-specific training.

AMC2 ORO.TC.120&.125 Operator conversion training and differences training

GENERAL

- (a) The operator should determine the content of the conversion or differences training taking account of the technical crew member's previous training as documented in the technical crew member's training records.
- (b) Aircraft conversion or differences training should be conducted according to a syllabus and include the use of relevant equipment and emergency procedures and practice on a representative training device or on the actual aircraft.
- (c) The operator should specify in the operations manual the maximum number of types or variants that can be operated by a technical crew member.

AMC1 ORO.TC.135 Recurrent training

ELEMENTS

- (a) The 12-month period mentioned in ORO.TC.135 (a) should be counted from the last day of the month when the first checking was made. Further training and checking should be undertaken within the last 3 calendar months of that period. The new 12-month period should be counted from the original expiry date.
- (b) The recurrent practical training should include every year:
 - (1) emergency procedures including pilot incapacitation;
 - (2) evacuation procedures;
 - (3) touch-drills by each technical crew member for opening normal and emergency exits for (passenger) evacuation;
 - (4) the location and handling of emergency equipment and the donning by each technical crew member of life-jackets and protective breathing equipment (PBE), when applicable;
 - (5) first aid and the contents of the first-aid kit(s);
 - (6) stowage of articles in the cabin;
 - (7) use of dangerous goods, if applicable;
 - (8) incident and accident review; and
 - (9) crew resource management: all major topics of the initial CRM training should be covered over a period not exceeding 3 years.
- (c) Recurrent training should include every 3 years:
 - (1) practical training on operating and opening all normal and emergency exits for passenger evacuation in an aircraft or representative training device and demonstration of the operation of all other exits;
 - (2) practical training in the use of all fire fighting equipment as well as protective clothing representative of that carried in the aircraft. Each technical crew member should:
 - (i) extinguish a fire characteristic of an aircraft interior fire except that, in the case of Halon extinguishers, an alternative extinguishing agent may be used; and
 - (ii) practise the donning and use of protective breathing equipment (when fitted) in an enclosed, simulated smoke-filled environment;
 - (3) use of pyrotechnics (actual or representative devices); and

- (4) demonstration of the use of the life-raft, where fitted.

AMC1 ORO.TC.140 Refresher training

ELEMENTS

- (a) Refresher training may include familiarisation flights.
- (b) Refresher training should include at least the following:
 - (1) emergency procedures, including pilot incapacitation;
 - (2) evacuation procedures;
 - (3) practical training on operating and opening all normal and emergency exits for passenger evacuation in an aircraft or representative training device and demonstration of the operation of all other exits; and
 - (4) the location and handling of emergency equipment, and the donning of life-jackets and protective breathing equipment, when applicable.