



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

OPERADOR:

Aeronaves Consideradas:

Manual de Operações

Edição ☐ :

Revisão ☐ :

LISTAGEM DE OUTRA DOCUMENTAÇÃO:

Requirements	Doc.REF. / Notes
SUBPART A GENERAL REQUIREMENTS	
SPA.GEN.105 Application for a specific approval	
(a) The operator applying for the initial issue of a specific approval shall provide to the competent authority the documentation required in the applicable Subpart, together with the following information:	NA
(1) the name, address and mailing address of the applicant;	
(2) a description of the intended operation.	
(b) The operator shall provide the following evidence to the competent authority:	
(1) compliance with the requirements of the applicable Subpart;	
(2) that the relevant elements defined in the mandatory part of the operational suitability data established in accordance with Regulation (EU) No 748/2012 are taken into account.	
(c) The operator shall retain records relating to (a) and (b) at least for the duration of the operation requiring a specific approval, or, if applicable, in accordance with Annex III (Part-ORO).	
AMC1 SPA.GEN.105(a) Application for a specific approval	
(a) Operating procedures should be documented in the operations manual.	
(b) If an operations manual is not required, operating procedures may be described in a manual specifying procedures (procedures manual). If the aircraft flight manual (AFM) or the pilot operating handbook (POH) contains such procedures, they should be considered as acceptable means to document the procedures	
SPA.GEN.110 Privileges of an operator holding a specific approval	
The scope of the activity that an operator is approved to conduct shall be documented and specified:	
(a) for operators holding an air operator certificate (AOC) in the operations specifications to the AOC;	
(b) for all other operators in the list of specific approvals.	
SPA.GEN.115 Changes to a specific approval	
When the conditions of a specific approval are affected by changes, the operator shall provide the relevant documentation to the competent authority and obtain prior approval for the operation.	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
SPA.GEN.120 Continued validity of a specific approval	
Specific approvals shall be issued for an unlimited duration and shall remain valid subject to the operator remaining in compliance with the requirements associated with the specific approval and taking into account the relevant elements defined in the mandatory part of the operational suitability data established in accordance with Regulation (EU) No 748/2012.	
SUBPART J HELICOPTER EMERGENCY MEDICAL SERVICE OPERATIONS	
SPA.HEMS.100 Helicopter emergency medical service (HEMS) operations	
GM1 SPA.HEMS.100(a)	
(a) Helicopters shall only be operated for the purpose of HEMS operations if the operator has been approved by the competent authority.	
(b) To obtain such approval by the competent authority, the operator shall:	
(1) operate in CAT and hold a CAT AOC in accordance with Annex III (Part-ORO);	
(2) demonstrate to the competent authority compliance with the requirements contained in this Subpart.	
SPA.HEMS.110 Equipment requirements for HEMS operations	
The installation of all helicopter dedicated medical equipment and any subsequent modifications and, where appropriate, its operation shall be approved in accordance with Regulation (EU) No 748/2012.	
SPA.HEMS.115 Communication	
In addition to that required by CAT.IDE.H, helicopters conducting HEMS flights shall have communication equipment capable of conducting two-way communication with the organisation for which the HEMS is being conducted and, where possible, to communicate with ground emergency service personnel.	
SPA.HEMS.120 HEMS operating minima	
GM1 SPA.HEMS.120	
(a) HEMS flights operated in performance class 1 and 2 shall comply with the weather minima in Table 1 for dispatch and en-route phase of the HEMS flight. In the event that during the en-route phase the weather conditions fall below the cloud base or visibility minima shown, helicopters certified for flights only under VMC shall abandon the flight or return to base. Helicopters equipped and certified for instrument meteorological conditions (IMC) operations may abandon the flight, return to base or convert in all respects to a flight conducted under instrument flight rules (IFR), provided the flight crew are suitably qualified.	
(b) The weather minima for the dispatch and en-route phase of a HEMS flight operated in performance class 3 shall be a cloud ceiling of 600 ft and a visibility of 1500 m. Visibility may be reduced to 800 m for short periods when in sight of land if the helicopter is manoeuvred at a speed that will give adequate opportunity to observe any obstacle and avoid a collision.	
SPA.HEMS.125 Performance requirements for HEMS operations	
GM1 SPA.HEMS.125(b)(3) Performance requirements for HEMS operations	
(a) Performance class 3 operations shall not be conducted over a hostile environment.	
(b) Take-off and landing	
(1) Helicopters conducting operations to/from a final approach and take-off area (FATO) at a hospital that is located in a congested hostile environment and that is used as a HEMS operating base shall be operated in accordance with performance class 1.	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
(2) Helicopters conducting operations to/from a FATO at a hospital that is located in a congested hostile environment and that is not a HEMS operating base shall be operated in accordance with performance class 1, except when the operator holds an approval in accordance with CAT.POL.H.225.	
(3) Helicopters conducting operations to/from a HEMS operating site located in a hostile environment shall be operated in accordance with performance class 2 and be exempt from the approval required by CAT.POL.H.305(a), provided compliance is shown with CAT.POL.H.305(b)(2) and (b)(3).	
(4) The HEMS operating site shall be big enough to provide adequate clearance from all obstructions. For night operations, the site shall be illuminated to enable the site and any obstructions to be identified.	
AMC1 SPA.HEMS.125(b)(4) HEMS OPERATING SITE DIMENSIONS	
(a) When selecting a HEMS operating site it should have a minimum dimension of at least 2 x D (the largest dimensions of the helicopter when the rotors are turning). For night operations, unsurveyed HEMS operating sites should have dimensions of at least 4 x D in length and 2 x D in width.	
(b) For night operations, the illumination may be either from the ground or from the helicopter.	
SPA.HEMS.130 Crew requirements	
(a) <i>Selection</i> . The operator shall establish criteria for the selection of flight crew members for the HEMS task, taking previous experience into account.	
(b) <i>Experience</i> . The minimum experience level for the commander conducting HEMS flights shall not be less than: (1) either: (i) 1 000 hours as pilot-in-command/commander of aircraft of which 500 hours are as pilot-in-command/commander on helicopters; or (ii) 1 000 hours as co-pilot in HEMS operations of which 500 hours are as pilot-in-command under supervision and 100 hours pilot-in-command/commander of helicopters; (2) 500 hours' operating experience in helicopters, gained in an operational environment similar to the intended operation; and (3) for pilots engaged in night operations, 20 hours of VMC at night as pilot-in-command/commander.	
(c) <i>Operational training</i> . Successful completion of operational training in accordance with the HEMS procedures contained in the operations manual.	
(d) <i>Recency</i> . All pilots conducting HEMS operations shall have completed a minimum of 30 minutes' flight by sole reference to instruments in a helicopter or in an FSTD within the last six months.	
(e) <i>Crew composition</i> (1) <i>Day flight</i> . The minimum crew by day shall be one pilot and one HEMS technical crew member. (i) This may be reduced to one pilot only when: (A) at a HEMS operating site the commander is required to fetch additional medical supplies. In such case the HEMS technical crew member may be left to give assistance to ill or injured persons while the commander undertakes this flight; (B) after arriving at the HEMS operating site, the installation of the stretcher precludes the HEMS technical crew member from occupying the front seat; or (C) the medical passenger requires the assistance of the HEMS technical crew member in flight.	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
<p>(ii) In the cases described in (i), the operational minima shall be as defined by the applicable airspace requirements; the HEMS operating minima contained in Table 1 of SPA.HEMS.120 shall not be used.</p> <p>(iii) Only in the case described in (i)(A) may the commander land at a HEMS operating site without the technical crew member assisting from the front seat.</p>	
<p>(2) <i>Night flight</i>. The minimum crew by night shall be:</p> <p>(i) two pilots; or</p> <p>(ii) one pilot and one HEMS technical crew member in specific geographical areas defined by the operator in the operations manual taking into account the following:</p> <p>(A) adequate ground reference;</p> <p>(B) flight following system for the duration of the HEMS mission;</p> <p>(C) reliability of weather reporting facilities;</p> <p>(D) HEMS minimum equipment list;</p> <p>(E) continuity of a crew concept;</p> <p>(F) minimum crew qualification, initial and recurrent training;</p> <p>(G) operating procedures, including crew coordination;</p> <p>(H) weather minima; and</p> <p>(I) additional considerations due to specific local conditions.</p>	
<p>(f) Crew training and checking</p> <p>(1) Training and checking shall be conducted in accordance with a detailed syllabus approved by the competent authority and included in the operations manual.</p> <p>(2) Crew members</p> <p>(i) Crew training programmes shall: improve knowledge of the HEMS working environment and equipment; improve crew coordination; and include measures to minimise the risks associated with en-route transit in low visibility conditions, selection of HEMS operating sites and approach and departure profiles.</p> <p>(ii) The measures referred to in (f)(2)(i) shall be assessed during:</p> <p>(A) VMC day proficiency checks, or VMC night proficiency checks when night HEMS operations are undertaken by the operator; and</p> <p>(A) (B) line checks.</p>	
AMC1 SPA.HEMS.130(b)(2)	
The minimum experience level for a commander conducting HEMS flights should take into account the geographical characteristics of the operation (sea, mountain, big cities with heavy traffic, etc.).	
AMC1 SPA.HEMS.130(d) Crew requirements	
This recency may be obtained in a visual flight rules (VFR) helicopter using vision limiting devices such as goggles or screens, or in an FSTD.	
AMC1 SPA.HEMS.130(e) Crew requirements	
<p>HEMS TECHNICAL CREW MEMBER</p> <p>(a) When the crew is composed of one pilot and one HEMS technical crew member, the latter should be seated in the front seat (co-pilot seat) during the flight, so as to be able to carry out his/her primary task of assisting the commander in:</p> <p>(1) collision avoidance;</p> <p>(2) the selection of the landing site; and</p> <p>(3) the detection of obstacles during approach and take-off phases.</p> <p>(b) The commander may delegate other aviation tasks to the HEMS technical crew member, as necessary:</p>	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
<p>(1) assistance in navigation; (2) assistance in radio communication/radio navigation means selection; (3) reading of checklists; and (4) monitoring of parameters. (c) The commander may also delegate to the HEMS technical crew member tasks on the ground: (1) assistance in preparing the helicopter and dedicated medical specialist equipment for subsequent HEMS departure; or (2) assistance in the application of safety measures during ground operations with rotors turning (including: crowd control, embarking and disembarking of passengers, refuelling etc.). (d) There may be exceptional circumstances when it is not possible for the HEMS technical crew member to carry out his/her primary task as defined under (a). This is to be regarded as exceptional and is only to be conducted at the discretion of the commander, taking into account the dimensions and environment of the HEMS operating site.) (e) When two pilots are carried, there is no requirement for a HEMS technical crew member, provided that the pilot monitoring performs the aviation tasks of a technical crew member.</p>	
AMC1 SPA.HEMS.130(e)(2)(ii)(B) Crew requirements	
A flight following system is a system providing contact with the helicopter throughout its operational area.	
AMC1 SPA.HEMS.130(f)(1) Crew requirements	
<p>TRAINING AND CHECKING SYLLABUS (a) The flight crew training syllabus should include the following items: (1) meteorological training concentrating on the understanding and interpretation of available weather information; (2) preparing the helicopter and specialist medical equipment for subsequent HEMS departure; (3) practice of HEMS departures; (4) the assessment from the air of the suitability of HEMS operating sites; and (5) the medical effects air transport may have on the patient. (b) The flight crew checking syllabus should include: (1) proficiency checks, which should include landing and take-off profiles likely to be used at HEMS operating sites; and (2) line checks, with special emphasis on the following: (i) local area meteorology; (ii) HEMS flight planning; (iii) HEMS departures; (iv) the selection from the air of HEMS operating sites; (v) low level flight in poor weather; and (vi) familiarity with established HEMS operating sites in the operator's local area register. (c) HEMS technical crew members should be trained and checked in the following items: (1) duties in the HEMS role; (2) map reading, navigation aid principles and use; (3) operation of radio equipment; (4) use of on-board medical equipment; (5) preparing the helicopter and specialist medical equipment for subsequent HEMS departure;</p>	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
<p>(6) instrument reading, warnings, use of normal and emergency checklists in assistance of the pilot as required;</p> <p>(7) basic understanding of the helicopter type in terms of location and design of normal and emergency systems and equipment;</p> <p>(8) crew coordination;</p> <p>(9) practice of response to HEMS call out;</p> <p>(10) conducting refuelling and rotors running refuelling;</p> <p>(11) HEMS operating site selection and use;</p> <p>(12) techniques for handling patients, the medical consequences of air transport and some knowledge of hospital casualty reception;</p> <p>(13) marshalling signals;</p> <p>(14) underslung load operations as appropriate;</p> <p>(15) winch operations as appropriate;</p> <p>(16) the dangers to self and others of rotor running helicopters including loading of patients; and</p> <p>(17) the use of the helicopter inter-communications system.</p>	
AMC1 SPA.HEMS.130(f)(2)(ii)(B) Crew requirements	
<p>LINE CHECKS</p> <p>Where due to the size, the configuration, or the performance of the helicopter, the line check cannot be conducted on an operational flight, it may be conducted on a specially arranged representative flight. This flight may be immediately adjacent to, but not simultaneous with, one of the biannual proficiency checks.</p>	
SPA.HEMS.135 HEMS medical passenger and other personnel briefing	
<p>(a) <i>Medical passenger</i>. Prior to any HEMS flight, or series of flights, medical passengers shall have been briefed to ensure that they are familiar with the HEMS working environment and equipment, can operate on-board medical and emergency equipment and can take part in normal and emergency entry and exit procedures.</p>	
<p>(b) <i>Ground emergency service personnel</i>. The operator shall take all reasonable measures to ensure that ground emergency service personnel are familiar with the HEMS working environment and equipment and the risks associated with ground operations at a HEMS operating site.</p>	
<p>(c) <i>Medical patient</i>. Notwithstanding CAT.OP.MPA.170, a briefing shall only be conducted if the medical condition makes this practicable.</p>	
AMC1 SPA.HEMS.135(a) HEMS medical passenger and other personnel briefing	
<p>HEMS MEDICAL PASSENGER BRIEFING</p> <p>The briefing should ensure that the medical passenger understands his/her role in the operation, which includes:</p> <p>(a) familiarisation with the helicopter type(s) operated;</p> <p>(b) entry and exit under normal and emergency conditions both for self and patients;</p> <p>(c) use of the relevant on-board specialist medical equipment;</p> <p>(d) the need for the commander's approval prior to use of specialised equipment;</p> <p>(e) method of supervision of other medical staff;</p> <p>(f) the use of helicopter inter-communication systems;</p> <p>(g) location and use of on board fire extinguishers; and</p> <p>(h) the operator's crew coordination concept including relevant elements of crew resource management.</p>	
AMC1.1 SPA.HEMS.135(a) HEMS medical passenger and other personnel briefing	
HEMS MEDICAL PASSENGER BRIEFING	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
Another means of complying with the rule as compared to that contained in AMC1 SPA.HEMS.135(a) is to make use of a training programme as mentioned in AMC1.1 CAT.OP.MPA.170.	
AMC1 SPA.HEMS.135(b) HEMS medical passenger and other personnel briefing	
GROUND EMERGENCY SERVICE PERSONNEL (a) The task of training large numbers of emergency service personnel is formidable. Wherever possible, helicopter operators should afford every assistance to those persons responsible for training emergency service personnel in HEMS support. This can be achieved by various means, such as, but not limited to, the production of flyers, publication of relevant information on the operator's web site and provision of extracts from the operations manual. (b) The elements that should be covered include: (1) two-way radio communication procedures with helicopters; (2) the selection of suitable HEMS operating sites for HEMS flights; (3) the physical danger areas of helicopters; (4) crowd control in respect of helicopter operations; and (5) the evacuation of helicopter occupants following an on-site helicopter accident.	
SPA.HEMS.140 Information and documentation	
(a) The operator shall ensure that, as part of its risk analysis and management process, risks associated with the HEMS environment are minimised by specifying in the operations manual: selection, composition and training of crews; levels of equipment and dispatch criteria; and operating procedures and minima, such that normal and likely abnormal operations are described and adequately mitigated.	
(b) Relevant extracts from the operations manual shall be made available to the organisation for which the HEMS is being provided.	
AMC1 SPA.HEMS.140 Information and documentation	
OPERATIONS MANUAL The operations manual should include: (a) the use of portable equipment on board;	
(b) guidance on take-off and landing procedures at previously unsurveyed HEMS operating sites;	
(c) the final reserve fuel, in accordance with SPA.HEMS.150;	
(d) operating minima;	
(e) recommended routes for regular flights to surveyed sites, including the minimum flight altitude;	
(f) guidance for the selection of the HEMS operating site in case of a flight to an unsurveyed site;	
(g) the safety altitude for the area overflown; and	
(h) procedures to be followed in case of inadvertent entry into cloud.	
SPA.HEMS.145 HEMS operating base facilities	
(a) If crew members are required to be on standby with a reaction time of less than 45 minutes, dedicated suitable accommodation shall be provided close to each operating base.	
(b) At each operating base the pilots shall be provided with facilities for obtaining current and forecast weather information and shall be provided with satisfactory communications with the appropriate air traffic services (ATS) unit. Adequate facilities shall be available for the planning of all tasks.	
SPA.HEMS.150 Fuel/energy supply – alleviation	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
As an alternative to points CAT.OP.MPA.191(b), (c), and (d), when the helicopter emergency medical services (HEMS) mission is conducted under visual flight rules (VFR) within a local and defined geographical area, the fuel/energy policy shall ensure that on completion of the mission, the final reserve fuel/energy is sufficient for: (a) 30-minute flying time at best-range speed; or (b) 20-minute flying time at best-range speed by day, when operating within an area providing continuous and suitable operating sites.	
SPA.HEMS.155 Refueling with passengers on board	
A refuelling procedure with either rotors stopped or rotors turning shall be provided in accordance with point CAT.OP.MPA.200 'Special refuelling or defueling of the aircraft.	
ORO.TC.100 Scope	
This Subpart establishes the requirements to be met by the operator when operating an aircraft with technical crew members in commercial air transport helicopter emergency medical service (HEMS), night vision imaging system (NVIS) operations or helicopter hoist operations (HHO).	
ORO.TC.105 Conditions for assignment to duties	
GM1 ORO.TC.105 Conditions for assignment to duties	
(a) Technical crew members in commercial air transport HEMS, HHO or NVIS operations shall only be assigned duties if they: (1) are at least 18 years of age; (2) are physically and mentally fit to safely discharge assigned duties and responsibilities; (3) have completed all applicable training required by this Subpart to perform the assigned duties; (4) have been checked as proficient to perform all assigned duties in accordance with the procedures specified in the operations manual.	
(b) Before assigning to duties technical crew members who are self-employed and/or working on a freelance or part-time basis, the operator shall verify that all applicable requirements of this Subpart are complied with, taking into account all services rendered by the technical crew member to other operator(s) to determine in particular: (1) the total number of aircraft types and variants operated; (2) the applicable flight and duty time limitations and rest requirements.	
ORO.TC.110 Training and checking	
(a) The operator shall establish a training programme in accordance with the applicable requirements of this Subpart to cover the duties and responsibilities to be performed by technical crew members.	
(b) Following the completion of initial, operator conversion, differences and recurrent training, each technical crew member shall undergo a check to demonstrate their proficiency in carrying out normal and emergency procedures.	
(c) Training and checking shall be conducted for each training course by personnel suitably qualified and experienced in the subject to be covered. The operator shall inform the competent authority about the personnel conducting the checks.	
AMC1 ORO.TC.110 Training and checking	
(a) Elements of training that require individual practice may be combined with practical checks.	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
(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.110(a) Training and checking	
The technical crew training programme for initial, operator conversion and recurrent training should include relevant CRM training elements as specified in AMC1 ORO.FC.115.	
ORO.TC.115 Initial training	
Before undertaking the operator conversion training, each technical crew member shall complete initial training, including:	
(a) general theoretical knowledge on aviation and aviation regulations covering all elements relevant to the duties and responsibilities required of technical crew;	
(b) fire and smoke training;	
(c) survival training on ground and in water, appropriate to the type and area of operation;	
(d) aero-medical aspects and first-aid;	
(e) communication and relevant CRM elements of ORO.FC.115 and ORO.FC.215.	
AMC1 ORO.TC.115 Initial training	
(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.	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
<p>(3) When conducting extended overwater operations, water survival training, including the use of personal flotation equipment.</p> <p>(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.</p> <p>(5) Survival training appropriate to the areas of operation (e.g. polar, desert, jungle, sea or mountain).</p> <p>(6) Aero-medical aspects and first aid, including:</p> <p>(i) instruction on first aid and the use of first-aid kits; and</p> <p>(ii) the physiological effects of flying.</p> <p>(7) Effective communication between technical crew members and flight crew members, including common language and terminology.</p>	
ORO.TC.120 Operator conversion training	
<p>Each technical crew member shall complete:</p> <p>(a) operator conversion training, including relevant CRM elements,</p> <p>(1) before being first assigned by the operator as a technical crew member; or</p> <p>(2) when changing to a different aircraft type or class, if any of the equipment or procedures mentioned in (b) are different.</p>	
<p>(b) Operator conversion training shall include:</p> <p>(1) the location and use of all safety and survival equipment carried on the aircraft;</p> <p>(2) all normal and emergency procedures;</p> <p>(3) on-board equipment used to carry out duties in the aircraft or on the ground for the purpose of assisting the pilot during HEMS, HHO or NVIS operations.</p>	
AMC1 ORO.TC.120&.125 Operator conversion training and differences training	
<p>(a) Operator conversion training mentioned in ORO.TC.120(b) and differences training mentioned in ORO.TC.125(a) should include the following:</p> <p>(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:</p> <p>(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</p> <p>(ii) practise the donning and use of protective breathing equipment (when fitted) in an enclosed, simulated smoke-filled environment.</p> <p>(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.</p> <p>(3) Evacuation procedures and other emergency situations, including:</p> <p>(i) recognition of planned or unplanned evacuations on land or water — this training should include recognition of unusable exits or unserviceable evacuation equipment;</p> <p>(ii) in-flight fire and identification of fire source; and</p> <p>(iii) other in-flight emergencies.</p> <p>(4) When the flight crew is more than one, training on assisting if a pilot becomes incapacitated, including a demonstration of:</p> <p>(i) the pilot's seat mechanism;</p> <p>(ii) fastening and unfastening the pilot's seat restraint system;</p> <p>(iii) use of the pilot's oxygen equipment, when applicable; and</p> <p>(iv) use of pilots' checklists.</p>	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
<p>(5) Training on, and demonstration of, the location and use of safety equipment, including the following:</p> <ul style="list-style-type: none"> (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. <p>(6) Training on passenger briefing/safety demonstrations and preparation of passengers for normal and emergency situations.</p> <p>(7) Training on the use of dangerous goods, if applicable.</p> <p>(8) Task-specific training.</p>	
AMC2 ORO.TC.120&.125 Operator conversion training and differences training	
(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.	
ORO.TC.125 Differences training	
<p>(a) Each technical crew member shall complete differences training when changing equipment or procedures on types or variants currently operated.</p> <p>(b) The operator shall specify in the operations manual when such differences training is required.</p>	
ORO.TC.130 Familiarisation flights	
Following completion of the operator conversion training, each technical crew member shall undertake familiarisation flights prior to operating as a required technical crew member in HEMS, HHO or NVIS operations.	
ORO.TC.135 Recurrent training	
<p>(a) Within every 12-month period, each technical crew member shall undergo recurrent training relevant to the type or class of aircraft and equipment that the technical crew member operates. Elements of CRM shall be integrated into all appropriate phases of the recurrent training.</p> <p>(b) Recurrent training shall include theoretical and practical instruction and practice.</p>	
AMC1 ORO.TC.135 Recurrent training	
<p>(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.</p> <p>(b) The recurrent practical training should include every year:</p> <ul style="list-style-type: none"> (1) emergency procedures, including pilot incapacitation; (2) evacuation procedures; 	



AUTORIDADE NACIONAL DA AVIAÇÃO CIVIL

Direção de Operações de Voo Departamento De Transporte Aéreo CHECKLIST DE SUPORTE À APROVAÇÃO SPA HEMS REGULAMENTO (UE) 965/2012

Requirements	Doc.REF. / Notes
<p>(3) touch-drills by each technical crew member for opening normal and emergency exits for (passenger) evacuation;</p> <p>(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;</p> <p>(5) first aid and the contents of the first-aid kit(s);</p> <p>(6) stowage of articles in the cabin;</p> <p>(7) use of dangerous goods, if applicable;</p> <p>(8) incident and accident review; and</p> <p>(9) crew resource management: all major topics of the initial CRM training should be covered over a period not exceeding 3 years.</p> <p>(c) Recurrent training should include every 3 years:</p> <p>(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;</p> <p>(2) practical training in the use of all firefighting equipment as well as protective clothing representative of that carried in the aircraft. Each technical crew member should:</p> <p>(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</p> <p>(ii) practise the donning and use of protective breathing equipment (when fitted) in an enclosed, simulated smoke-filled environment;</p> <p>(3) use of pyrotechnics (actual or representative devices); and</p> <p>(4) demonstration of the use of the life raft, where fitted.</p>	
ORO.TC.140 Refresher training	
<p>(a) Each technical crew member who has not undertaken duties in the previous six months shall complete the refresher training specified in the operations manual.</p> <p>(b) The technical crew member who has not performed flying duties on one particular aircraft type or class during the preceding six months shall, before being assigned on that type or class, complete either:</p> <p>(1) refresher training on the type or class; or</p> <p>(2) two familiarisation sectors on the aircraft type or class.</p>	
AMC1 ORO.TC.140 Refresher training	
<p>(a) Refresher training may include familiarisation flights.</p> <p>(b) Refresher training should include at least the following:</p> <p>(1) emergency procedures, including pilot incapacitation;</p> <p>(2) evacuation procedures;</p> <p>(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</p> <p>(4) the location and handling of emergency equipment, and the donning of life jackets and protective breathing equipment, when applicable.</p>	

Pelo Operador e Requerente

Data: ____/____/____

(Assinatura)