

CIVIL AVIATION AUTHORITY OF BANGLADESH

Flight Standard & Regulations Division

Compliance Checklist for Specific Approval- HEMS (To be attached to the SPA application and documentation)

AOC number: Aircraft Type: Registration Marks: MSN

In accordance with SPA.HEMS.100 Helicopter Emergency Medical Service Operations (HEMS) shall only be made if the operator has been granted a HEMS approval.

This compliance Checklist is designed to assist operators in demonstrating compliance with the applicable requirements.

An application for HEMS approval will be connected with either an application for a new AOC, an application to add a new aircraft type to an existing AOC, or an application to add HEMS approval to an aircraft type already listed on the AOC. In all cases, this Compliance Checklist should be submitted to CAAB

The CAAB reserves the right to refuse an application if this Compliance Checklist is not completed in sufficient detail, or contains inaccurate information. Please ensure that the '**Operator's Comments**' column is completed thoroughly, including references to operations manual entries, supporting documentation and sufficient statements to demonstrate compliance.

statements to demonstrate compliance.				
Requirement	Operator's Comments	CAAB's Comment (SAT/UNSAT)		
Helicopter emergency medical service (HEMS) operations				
SPA.HEMS.100				
a) Helicopters shall only be operated for the purpose of HEMS				
operations if the operator has been approved by the CAAB.				
b) To obtain such approval by the competent authority, the				
operator shall:				
(1) operate in CAT and hold a CAT AOC as per ANO 6-3;(2) demonstrate to the competent authority compliance with				
the requirements contained in this Subpart.				
c) Operations without an assured safe forced landing capability				
(1) Operations without an assured safe forced landing				
capability during the take-off and landing phases shall				
only be conducted if the operator has been granted an				
approval by the CAAB.				
(2) To obtain and maintain such approval the operator				
shall:				
 i. conduct a risk assessment, specifying: A. the type of helicopter; and 				
B. the type of operations;				
ii. implement the following set of conditions:				
A. attain and maintain the				
helicopter/engine modification standard				
defined by the manufacturer;				
B. conduct the preventive maintenance				
actions recommended by the helicopter				
or engine manufacturer;				
C. include take-off and landing procedures				
in the operations manual, where they do				
not already exist in the AFM;				
D. specify training for flight crew; and				
E. provide a system for reporting to the				
manufacturer loss of power, engine				
shutdown or engine failure events; and				
(3) implement a usage monitoring system (UMS).				

Requirement	Operator's Comments	CAAB's Comment (SAT/UNSAT)
Equipment requirements for HEMS operations		(SIII)
SPA.HEMS.110		
The installation of all helicopter dedicated medical equipment and any subsequent modifications and, where appropriate, its operation shall be approved in accordance with ANO Part-21.		
Communication		
SPA.HEMS.115		
In addition to that required by ANO Part-IDE section 2, helicopters conducting HEMS flights shall have communication equipment capable of conducting two-way communication with the organization for which the HEMS is being conducted and, where possible, to communicate with ground emergency service personnel.		
Operating minima		
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. <i>See Table 1</i>		
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.		
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, except when the operator holds an approval under the privileges of AOC. (2) 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 SPA.HEMS.100 (c)(1), provided compliance is shown with SPA.HEMS.100 (c)(2)(i) and (2)(ii). (3) The HEMS operating site shall be big enough to provide adequate clearance from all obstructions. Night operations shall be restricted to FATO at aerodromes. 		

R	equire	ement	Operator's Comments	CAAB's Comment (SAT/UNSAT)
AM	AMC1(b)(4) Hems operating site dimensions			(8111) 61(8111)
Cro	ew req	uirements		
SPA a)	Selec	MS.130 tion. The operator shall establish criteria for the tion of flight crew members for the HEMS task, taking		
	previ	ous experience into account.		
b)	_	rience. The minimum experience level for the pilot in nand conducting HEMS flights shall not be less than:		
	(1)	either:		
		(i) 1 000 hours as pilot-in-command/pilot in command of aircraft of which 500 hours are as pilot-incommand/pilot in command on helicopters; or		
		(ii) 1 000 hours as co-pilot in HEMS operations of which 500 hours are as pilot-incommand under supervision and 100 hours pilot-in-command/pilot in command 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/pilot in command.		
AM	1C1(b)	(2) Experience		
c)	traini	ational training. Successful completion of operational ng in accordance with the HEMS procedures ined in the operations manual.		
d)	have refere	ncy. All pilots conducting HEMS operations shall completed a minimum of 30 minutes' flight by sole ence to instruments in a helicopter or in an FSTD in the last six months.		
AN		Recency		
e)		composition		
	(1)	Day flight. 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 pilot in command 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 pilot in command 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;		
		(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.		

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(iii) Only in the case described in (i)(A) may the pilot in command land at a HEMS operating site without the technical crew member assisting from the front seat.		(8.11, 6.16.11)
(2) Night flight. The minimum crew by night shall be:		
(i) two pilots.		
AMC1(e) Hems technical crew member		
AMC1(e)(2)(ii)(B) Flight following system		
f) Crew training and checking		
(1) Training and checking shall be conducted in accordance with a detailed syllabus approved by the CAAB and included in the operations manual.		
(2) Crew members		
(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.		
(ii) The measures referred to in (f)(2)(i) shall be assessed during:		
(A) VMC day proficiency checks, or VMC night proficiency checks when night HEMS operations are undertaken by the operator.		
(B) line check		
AMC1(f)(1) Training and checking syllabus		
AMC1(f)(2)(ii)(B) Line checks		
HEMS medical passenger and other personnel briefing		
SPA.HEMS.135		
a) Medical passenger. 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.		
b) Ground emergency service personnel. 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.		
c) <i>Medical patient</i> . A briefing shall only be conducted if the medical condition makes this practicable on the followings		
(1) given briefings and demonstrations relating to safety in a form that facilitates the application of the procedures applicable in the event of an emergency; and		
(2) provided with a safety briefing card on which picture- type instructions indicate the operation of safety and emergency equipment and emergency exits likely to be used by passengers.		

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Requirement		Operator's Comments	CAAB's Comment (SAT/UNSAT)
AMC1 (a) Hems medical passenger briefing			
AMC	1.1 (a) Hems medical passenger briefing		
cont	her means of complying with the rule as compared to that ained in AMC1-SPA.HEMS.135(a) is to make use of a ing programme as mentioned below:		
(a)	The operator may replace the standard passenger briefing/demonstration with a passenger training programme covering all safety and emergency procedures for a given type of aircraft.		
(b)	Only passengers who have been trained according to this programme and have flown on the aircraft type within the last 90 days may be carried on board without receiving a briefing/demonstration.		
AMO	C1 (b) Ground emergency service personnel		
Inform	mation and documentation -		
AMC	1 SPA.HEMS.140		
Opera	tions manual:		
(A) th	e 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.		
HEM	S operating base facilities		
SPA.I	HEMS.145		
re	f crew members are required to be on standby with a eaction time of less than 45 minutes, Dedicated suitable ecommodation shall be provided close to each operating ase.		
fa in co (A	at each operating base the pilots shall be provided with acilities for obtaining current and Forecast weather aformation and shall be provided with satisfactory communications with the Appropriate air traffic services (ATS) unit. Adequate facilities shall be available for the lanning of All tasks.		
Fuel supply			
SPA.F	HEMS.150		
lo ca re th	When the HEMS mission is conducted under VFR within a socal and defined geographical area, standard fuel planning an be employed provided the operator establishes final eserve fuel to ensure that, on completion of the mission are fuel remaining is not less than an amount of fuel difficient for:		

Requirement	Operator's Comments	CAAB's Comment (SAT/UNSAT)	
 (1) 30 minutes of flying time at normal cruising conditions; or (2) 20 minutes of flying time at best-range speed by day, when operating within an area providing continuous 		(6127-61-1612-17)	
and suitable operating sites.			
Re-fuelling with passengers embarking, on board or disembarking			
SPA.HEMS.155			
When the pilot in command considers refuelling with passengers on board to be necessary, it can be undertaken either rotors stopped or rotors turning provided the following requirements are met: a) door(s) on the refuelling side of the helicopter shall remain closed; b) door(s) on the non-refuelling side of the helicopter shall remain open, weather permitting;			
c) firefighting facilities of the appropriate scale shall be positioned so as to be immediately available in the event of a fire; and d) sufficient personnel shall be immediately available to move			
patients clear of the helicopter in the event of a fire.			
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Signed: Da	ıte:		

Position in company: