

Operational and emergency equipment to be carried on board Isle of Man registered helicopters

When a helicopter is certificated by the State of Design, the design requirements stipulate only minimal equipment that should be installed. Prior to operating the helicopter, the owner/operator is required to decide how and where the helicopter will operate and based upon this information decide what operational and emergency equipment should be carried. In the majority of cases, the manufacture of the helicopter and installation of equipment is carried out in parallel so that at the point of delivery, all required equipment is on board.

The following information is provided to assist the owner/operator to locate the equipment requirements within the Air Navigation (Isle of Man) Order 2015 as amended (ANO) and determine what equipment must be carried for the operation of their helicopter. **The ANO shall be used as the definitive source and for full details of equipment to be carried and in what circumstances of flight**, please refer to Part 4, Equipment of Aircraft, Schedule 3 Aircraft Equipment (and reference Article 24(6) and 32(2)) and Schedule 4 Radio Communication and Radio Navigation Equipment of Aircraft (and reference Article 34).

The following tables include the Items of Equipment required by the ANO, the relevant equipment scales (and page numbers), the page number to the relevant circumstances of flight, and where appropriate additional comments to assist the operator as to whether the equipment item is applicable and any specific IOM national requirements that are required when preparing and/or amending a Minimum Equipment List (MEL).

Notes:

- 1. If the helicopter is flying in a combination of circumstances, the scales of equipment do not need to be duplicated.*
- 2. Flying time in relation to a helicopter should be calculated on the assumption that it is flying in still air at the speed specified in the relevant flight manual as the speed for compliance with regulations governing flights over water.*
- 3. In the Schedule "day" means the time from half an hour before sunrise until half an hour after sunset (both times exclusive), sunset and sunrise being determined at surface level.*
- 4. Some of the items of equipment do not need to be of a type approved by the IOMAR; these items can be found in the ANO, Schedule 3 Aircraft Equipment, paragraph 3;*

Schedule 3 – Aircraft Equipment for M- Registered Helicopters

The page numbers referred to in this document relate to the 'CONSOLIDATED' version of the ANO (IOM) 2015 as amended. Therefore, please cross reference the page numbers listed in the tables with the [Consolidated Air Navigation \(Isle of Man\) Order 2015 as amended \(ANO\)](#).

Item of equipment	ANO Scale	Page reference for Circumstances of flight and Scale	Comment	MEL National Requirements as applicable to IOM Registered Helicopters	
				deferment period and/or conditions	required distribution
Spare fuses	A(1)	Page 153 Page 157	Required on aircraft where fuses are used - spare electrical fuses of appropriate ratings are required for replacement of those accessible in flight.		
Maps, charts and codes	A(2)	Page 153 Page 157	Required on all flights		
Accessible medical supplies	A(3)	Page 153 Page 157	Required on all flights		Accessible medical supplies comprising one or more first aid kits appropriate to the number of passengers the helicopter is authorised to carry; the contents of the first aid kit(s) to be determined by the operator having due regard to the nature of the operation
Hand fire extinguisher	A(4)	Page 153 Page 157	Required on all flights		One hand held fire extinguisher in the flight crew compartment and in each passenger compartment separate from flight crew compartment except if passenger compartment is readily accessible to flight crew
Safety belt, safety belt with diagonal shoulder strap, safety harness, child restraint device	B	Page 153 Page 157/158	B(1) to B(5) inclusive are required on all flights		

Item of equipment	ANO Scale	Page reference for Circumstances of flight and Scale	Comment	MEL National Requirements as applicable to IOM Registered Helicopters	
				deferment period and/or conditions	required distribution
Lighting equipment for displaying lights, electrical equipment for illumination	C	Page 153 Page 158	Required for night flights		
Slip indicator, turn indicator, gyroscopic bank & pitch indicator, gyroscopic direction indicator, sensitive pressure altimeter, magnetic heading equipment	D	Page 153 Page 158/159	Required when flying VFR in sight of the surface		
Slip indicator, turn indicator, gyroscopic bank & pitch indicator, gyroscopic direction indicator, sensitive pressure altimeter	E	Page 153 Page 159	Required when flying VFR not in sight of the surface, & flying IFR by day*, & flying at Night* (*see page 153 for further details)		
Timepiece, equipment to manage power supply to gyroscopic instrument, Rate of climb and descent indicator, equipment to calibrate outside air temperature, airspeed indicators	F	Page 153 Page 159	Required when flying by day under IFR when the surface is not in sight within controlled airspace & flying by night when the surface is not in sight within controlled airspace		
Landing lights, electrical lighting system for illumination, electric torch, parachute flares, equipment to observe existence and build-up of ice on aircraft	G	Page 153 Page 160/161	G(3), (5) and (6) are required when flying at night with the surface in sight. & when flying at night with the surface not in sight inside controlled airspace. & when flying at night with the surface not in sight outside controlled airspace.		

Item of equipment	ANO Scale	Page reference for Circumstances of flight and Scale	Comment	MEL National Requirements as applicable to IOM Registered Helicopters	
				deferment period and/or conditions	required distribution
Lifejacket(s)	H	Page 154 Page 161	Required when flying over water beyond autorotational gliding distance from land suitable for an emergency landing, & on all flights on which in the event of any emergency occurring during the take-off or during the landing at the intended destination or any likely alternate destination it is reasonably possible that the helicopter would be forced to land onto water, & where the flight involves manoeuvres on water	A lifejacket equipped with a whistle and light for each person on board <i>and children's life jackets constructed for children less than 3 years old need not be equipped with a whistle</i>	A lifejacket equipped with a whistle and survivor locator light for each person on board readily accessible to each persons
Additional flotation equipment, parachute distress rocket signals, anchor/sea anchor, sound signal equipment	J	Page 154 Page 161	Required where the flight involves manoeuvres on water		
Life rafts and life raft equipment	K	Page 154 Page 162/163	Required where the flight involves manoeuvres on water		Helicopters carrying up to 19 persons on-board – Sufficient life rafts to accommodate all persons on board which are accessible and available. Helicopters carrying 20 or more persons on-board – a minimum of 2 life rafts sufficient together to accommodate all persons on board which are accessible and available.

Item of equipment	ANO Scale	Page reference for Circumstances of flight and Scale	Comment	MEL National Requirements as applicable to IOM Registered Helicopters	
				deferment period and/or conditions	required distribution
Emergency Locator Transmitter (ELT)- (<i>survival ELT - automatic ELT</i>)	KK	Page 154 Page 163	Required when flying over water at a distance of more than 10 minutes flying time at normal cruising speed away from land suitable for making an emergency landing* and/or flying over areas designated by the State as especially difficult for search and rescue* (*refer to page 154 for details)	Automatic ELT: May be inoperative for a maximum of 6 flights or 25 flight hours, whichever occurs first	
Oxygen, portable oxygen supply and associated apparatus	L1 or L2	Page 154/155 Page 163 – 168	Required when flying at a height of 10,000ft* or more above mean sea level (*refer to pages 154/5 for details)		
Ice formation prevention equipment	M	Page 154 Page 169	Required when weather reports or forecasts available at the aerodrome at the time of departure indicate that conditions favouring ice formation are likely to be met		
Survival equipment, clothing and rations –tropical conditions	U	Page 154 Page 175	Required when flying over substantially uninhabited land areas where in the event of an emergency landing, tropical conditions are likely to be met		
Survival equipment, clothing and rations – polar conditions	V	Page 154 Page 175	Required when flying over substantially uninhabited land areas where in the event of an emergency landing, polar conditions are likely to be met		
Emergency lighting systems	Z	Page 155 Page 176	Required when flying at night & with a MTOM over 5,700 kg, or, a seating capacity over 19.		

Schedule 4 – Radio Communication and Navigation Equipment for M- Registered Helicopters

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Item of Equipment	ANO Scale	Page references for Circumstances of flight and Scale	Comment	MEL National Requirements as applicable to IOM Registered Helicopters	
				deferment period and/or conditions	required distribution
Radio communication equipment	A	Page 178/179 Page 180			
Radio navigation equipment	D and G	Page 178/179 Page 180/181			
Secondary surveillance radar equipment including a pressure altitude reporting transponder	E2	Page 178/179 Page 180			
Antenna (diversity)	EE	Page 179 Page 180			
Radio communication and radio navigation equipment including distance measuring equipment (DME) and VHF omni- range (VOR) equipment	F	Page 178 Page 180			
Distance measuring equipment (DME), duplicated VHF omni-range (VOR) equipment, 75 MHz marker beacon receiver	H	Page 179 Page 181			