STATE OF KUWAIT
Directorate General of Civil Aviation

دولة الكويت
الإدارة العامة للطيران المدني

Date : 2021/3/8 التـــاريـخ :

Ref : 2021/094/REG/41 الإشـارة :

All KCASR Stakeholders and Users

Sub.: ***Regulatory Circular No. 2021-03.***
Revision Number 4 to Kuwait Civil Aviation Safety Regulations – KCASR 6 – OPERATION OF AIRCRAFTPART SPO – SPECIAL OPERATIONS.

Dear Sir,

Please find enclosed herewith the regulatory circular No. ***2021-03*** regarding the issuance of ***KCASR 6 – OPERATION OF AIRCRAFTPART SPO – SPECIAL OPERATIONS Rev. 4***. This is for your information and distribution to all concerned departments.

Up to date KCASR Parts are published on the DGCA/ASD website (https://kcasr.dgca.gov.kw).

If required, the DGCA/Aviation Safety Department personnel are available to answer your questions on the interpretation and intended implementation of the proposed amendments.

KCASR 6 – OPERATION OF AIRCRAFTPART SPO – SPECIAL OPERATIONS Rev. 4 will be in effect from 08/Apr/2021.

Yours Sincerely,

Salman Sabah Alsalem Alhamoud Alsabah
President of Civil Aviation

President of Civil Aviation.

CC: Director General of Civil Aviation.
Dy. Dir. Gen. Kuwait. Intel. Airport Affairs.
Dy. Dir. Gen. for Air Navigation Services Affairs.
Safety Management Coordination Center (SMCC).
Head of Technical Office.
Civil Aviation Security Department.
Aviation Safety Director.
Air Transport Director.
Inspection & oversight Superintendent.
Head of Standards & Aviation Safety Regulations Division.

S.D.

www.dgca.gov.kw
E-mail: info@dgca.gov.kw

EM
4-3

ص.ب : ١٧ الصفاة - الرمز البريدي ١٣٠٠١ دولة الكويت - البدالة ٢٤٣٣٦٦٩٩ (٩٦٥+) - الرد الآلي : ١٦١ (٩٦٥+) - الفاكس : ٢٤٧١٣٥٠٤ (٩٦٥+)
P.O. Box 17 Safat - P. Code 13001 - State of Kuwait - Operator : (+965) 24336699 - IVR : (+965) 161 - Fax : (+965) 24713504

STATE OF KUWAIT
Directorate General of Civil Aviation

دولة الكويت
الإدارة العامة للطيران المدني

Date : 2021/3/8 التـــــاريـخ :

Ref :2021/093/REG/41 الإشـارة :

REGULATORY CIRCULAR (NO. 2021-03)

Subject:

Notice of Amendment to Kuwait Civil Aviation Safety Regulations KCASR (issue 4).

Purpose:

The purpose of this Regulatory Circular No. **2021-03** is to Amend **KCASR 6 – OPERATION OF AIRCRAFTPART SPO – SPECIAL OPERATIONS** (issue 4) .

This Regulatory Circular No.**2021-03** is based on (NPA) No. 2021-01 dated on 11/Jan/2021

Revisions:

This amendment will be included in revision (**04**) of KCASR 6 – OPERATION OF AIRCRAFTPART SPO – SPECIAL OPERATIONS.

Regulatory Requirements:

This amendment shall apply to the following Organizations approved by the Directorate General of Civil Aviation (DGCA) or authorized to operate within the State of Kuwait:

1. Approved Maintenance Organizations (AMO) Holders;
2. Air Navigation Service Providers;
3. Air Operator Certificate (AOC) & Private Operator Certificate (POC) Holders;
4. Airport Operators;
5. Ground Handling Service Providers;
6. Flying Training Organizations;
7. All users of KCASRs.

Effective Date:

This new revision will be in effect from **08/Apr/2021**.

Required Action:

All users of KCASR are required to comply with the provisions contained within this amendment from the effective date.

President of Civil Aviation

Salman Sabah Alsalem Alhmoud Alsabah
President of Civil Aviation

S.D.

www.dgca.gov.kw
E-mail: info@dgca.gov.kw

ص.ب : ١٧ الصفاة - الرمز البريدي ١٣٠٠١ دولة الكويت - البدالة ٢٤٣٣٦٦٩٩ (٩٦٥+) - الرد الآلي : ١٦١ (٩٦٥+) - الفاكس : ٢٤٧١٣٥٠٤ (٩٦٥+)
P.O. Box 17 Safat - P. Code 13001 - State of Kuwait - Operator : (+965) 24336699 - IVR : (+965) 161 - Fax : (+965) 24713504

Kuwait Civil Aviation Safety Regulations

KCASR 6 – OPERATION OF AIRCRAFT

PART SPO – SPECIAL OPERATIONS

Table of Contents

Table of Contents 2
Amendment Record 8
Control of this Document 9
SPO.GEN.005 Scope 10
Subpart A - General requirements 11
SPO.GEN.100 Competent Authority 11
SPO.GEN.101 Means of compliance 11
SPO.GEN.102 Touring motor gliders and powered sailplanes 11
SPO.GEN.105 Crew responsibilities 11
SPO.GEN.106 Task specialists responsibilities 12
SPO.GEN.107 Pilot-in-command responsibilities and authority 12
SPO.GEN.110 Compliance with laws, regulations and procedures 14
SPO.GEN.115 Common language 14
SPO.GEN.119 Taxiing of aircraft 14
SPO.GEN.120 Taxiing of aeroplanes 14
SPO.GEN.125 Rotor engagement 14
SPO.GEN.130 Portable electronic devices 14
SPO.GEN.131 Use of electronic flight bags (EFBs) 14
SPO.GEN.135 Information on emergency and survival equipment carried 15
SPO.GEN.140 Documents, manuals and information to be carried 15
SPO.GEN.145 Preservation, production and use of flight recorder recordings - operations with complex motor-powered aircraft 16
SPO.GEN.150 Transport of dangerous goods 17
SPO.GEN.155 Release of dangerous goods 18
SPO.GEN.160 Carriage and use of weapons 18
SPO.GEN.165 Admission to the flight crew compartment 18
Subpart B - Operational procedures 19
SPO.OP.100 Use of aerodromes and operating sites 19
SPO.OP.105 Specification of isolated aerodromes - aeroplanes 19
SPO.OP.110 Aerodrome operating minima - aeroplanes and helicopters 19
SPO.OP.111 Aerodrome operating minima — NPA, APV, CAT I operations 20
SPO.OP.112 Aerodrome operating minima - circling operations with aeroplanes 21
SPO.OP.113 Aerodrome operating minima - onshore circling operations with helicopters 22
SPO.OP.115 Departure and approach procedures - aeroplanes and helicopters 22

SPO.OP.116 Performance-based navigation — aeroplanes and helicopters 22
SPO.OP.120 Noise abatement procedures 22
SPO.OP.125 Minimum obstacle clearance altitudes - IFR flights 23
SPO.OP.130 Fuel and oil supply - aeroplanes 23
SPO.OP.131 Fuel and oil supply - helicopters 23
SPO.OP.135 Safety briefing 24
SPO.OP.140 Flight preparation 24
SPO.OP.145 Take-off alternate aerodromes - complex motor-powered aeroplanes 25
SPO.OP.150 Destination alternate aerodromes - aeroplanes 25
SPO.OP.151 Destination alternate aerodromes - helicopters 26
SPO.OP.152 Destination aerodromes — instrument approach operations 26
SPO.OP.155 Refuelling with persons embarking, on board or disembarking 26
SPO.OP.160 Use of headset 26
SPO.OP.165 Smoking 27
SPO.OP.170 Meteorological conditions 27
SPO.OP.175 Ice and other contaminants - ground procedures 27
SPO.OP.176 Ice and other contaminants - flight procedures 27
SPO.OP.180 Take-off conditions - aeroplanes and helicopters 27
SPO.OP.185 Simulated abnormal situations in flight 28
SPO.OP.190 In-flight fuel management 28
SPO.OP.195 Use of supplemental oxygen 28
SPO.OP.200 Ground proximity detection 29
SPO.OP.205 Airborne collision avoidance system (ACAS) 29
SPO.OP.210 Approach and landing conditions - aeroplanes 29
SPO.OP.215 Commencement and continuation of approach - aeroplanes and helicopters 29
SPO.OP.230 Standard operating procedures 30
Subpart C - Aircraft performance and operating limitations 31
SPO.POL.100 Operating limitations - all aircraft 31
SPO.POL.105 Mass and balance 31
SPO.POL.110 Mass and balance system - commercial operations with aeroplanes and helicopters and non-commercial operations with complex motor-powered aircraft 31
SPO.POL.115 Mass and balance data and documentation - commercial operations with aeroplanes and helicopters and non-commercial operations with complex motor-powered aircraft 32
SPO.POL.116 Mass and balance data and documentation - alleviations 32
SPO.POL.120 Performance - general 32

SPO.POL.125 Take-off mass limitations - complex motor-powered aeroplanes 32
SPO.POL.130 Take-off - complex motor-powered aeroplanes 33
SPO.POL.135 En-route - one engine inoperative - complex motor-powered aeroplanes 33
SPO.POL.140 Landing - complex motor-powered aeroplanes 33
SPO.POL.145 Performance and operating criteria - aeroplanes 34
SPO.POL.146 Performance and operating criteria - helicopters 34
Subpart D - Instruments, data and equipment 35
Section 1 - Aeroplanes 35
SPO.IDE.A.100 Instruments and equipment - general 35
SPO.IDE.A.105 Minimum equipment for flight 35
SPO.IDE.A.110 Spare electrical fuses 36
SPO.IDE.A.115 Operating lights 36
SPO.IDE.A.120 Operations under VFR - flight and navigational instruments and associated equipment 36
SPO.IDE.A.125 Operations under IFR - flight and navigational instruments and associated equipment 37
SPO.IDE.A.126 Additional equipment for single-pilot operation under IFR 38
SPO.IDE.A.130 Terrain awareness warning system (TAWS) 38
SPO.IDE.A.131 Airborne collision avoidance system (ACAS) 39
SPO.IDE.A.132 Airborne weather detecting equipment - complex motor-powered aeroplanes 39
SPO.IDE.A.133 Additional equipment for operations in icing conditions at night - complex motor-powered aeroplanes 39
SPO.IDE.A.135 Flight crew interphone system 39
SPO.IDE.A.140 Cockpit voice recorder 39
SPO.IDE.A.145 Flight data recorder 40
SPO.IDE.A.146 Lightweight flight recorder 40
(3) they are first issued with an individual CofA on or after 5 September 2022. 41
SPO.IDE.A.150 Data link recording 41
SPO.IDE.A.155 Flight data and cockpit voice combination recorder 42
SPO.IDE.A.160 Seats, seat safety belts and restraint systems 42
SPO.IDE.A.165 First-aid kit 42
SPO.IDE.A.170 Supplemental oxygen - pressurised aeroplanes 43
SPO.IDE.A.175 Supplemental oxygen - non-pressurised aeroplanes 43
SPO.IDE.A.180 Hand fire extinguishers 44
SPO.IDE.A.181 Crash axe and crowbar 44

SPO.IDE.A.185 Marking of break-in points 44
SPO.IDE.A.190 Emergency locator transmitter (ELT) 44
SPO.IDE.A.195 Flight over water 45
SPO.IDE.A.200 Survival equipment 45
SPO.IDE.A.205 Individual protective equipment 46
SPO.IDE.A.210 Headset 46
SPO.IDE.A.215 Radio communication equipment 46
SPO.IDE.A.220 Navigation equipment 46
SPO.IDE.A.225 Transponder 47
SPO.IDE.A.230 Management of aeronautical databases 47
Section 2 - Helicopters 47
SPO.IDE.H.100 Instruments and equipment - general 47
SPO.IDE.H.105 Minimum equipment for flight 48
SPO.IDE.H.115 Operating lights 48
SPO.IDE.H.120 Operations under VFR - flight and navigational instruments and associated equipment 49
SPO.IDE.H.125 Operations under IFR - flight and navigational instruments and associated equipment 50
SPO.IDE.H.126 Additional equipment for single-pilot operation under IFR 50
SPO.IDE.H.132 Airborne weather detecting equipment - complex motor-powered helicopters 51
SPO.IDE.H.133 Additional equipment for operations in icing conditions at night - complex motor-powered helicopters 51
SPO.IDE.H.135 Flight crew interphone system 51
SPO.IDE.H.140 Cockpit voice recorder 51
SPO.IDE.H.145 Flight data recorder 52
SPO.IDE.H.146 Lightweight flight recorder 52
SPO.IDE.H.150 Data link recording 52
SPO.IDE.H.155 Flight data and cockpit voice combination recorder 53
SPO.IDE.H.160 Seats, seat safety belts and restraint systems 53
SPO.IDE.H.165 First-aid kit 54
SPO.IDE.H.175 Supplemental oxygen - non-pressurised helicopters 54
SPO.IDE.H.180 Hand fire extinguishers 54
SPO.IDE.H.185 Marking of break-in points 54
SPO.IDE.H.190 Emergency locator transmitter (ELT) 55
SPO.IDE.H.195 Flight over water - other-than-complex motor-powered helicopters 55

SPO.IDE.H.197 Life-jackets - complex motor-powered helicopters 56
SPO.IDE.H.198 Survival suits - complex motor-powered helicopters 56
SPO.IDE.H.199 Life-rafts, survival ELTs and survival equipment on extended overwater flights - complex motor-powered helicopters 56
SPO.IDE.H.200 Survival equipment 57
SPO.IDE.H.202 Helicopters certified for operating on water - miscellaneous equipment 57
SPO.IDE.H.203 All helicopters on flights over water - ditching 57
SPO.IDE.H.205 Individual protective equipment 57
SPO.IDE.H.210 Headset 57
SPO.IDE.H.215 Radio communication equipment 57
SPO.IDE.H.220 Navigation equipment 58
SPO.IDE.H.225 Transponder 58
SPO.IDE.H.230 Management of aeronautical databases 58
Section 3 - Sailplanes 60
SPO.IDE.S.100 Instruments and equipment - general 60
SPO.IDE.S.105 Minimum equipment for flight 60
SPO.IDE.S.115 Operations under VFR - flight and navigational instruments 60
SPO.IDE.S.120 Cloud flying - flight and navigational instruments 61
SPO.IDE.S.125 Seats and restraint systems 61
SPO.IDE.S.130 Supplemental oxygen 61
SPO.IDE.S.135 Flight over water 61
SPO.IDE.S.140 Survival equipment 62
SPO.IDE.S.145 Radio communication equipment 62
SPO.IDE.S.150 Navigation equipment 62
SPO.IDE.S.155 Transponder 62
Subpart E - Specific requirements 63
Section 1 - Helicopter external sling load operations (HESLO) 63
SPO.SPEC.HESLO.100 Standard operating procedures 63
SPO.SPEC.HESLO.105 Specific HESLO equipment 63
SPO.SPEC.HESLO.110 Transportation of dangerous goods 63
Section 2 - Human external cargo operations (HEC) 64
SPO.SPEC.HEC.100 Standard operating procedures 64
SPO.SPEC.HEC.105 Specific HEC equipment 64
Section 3 - Parachute operations (PAR) 65
SPO.SPEC.PAR.100 Standard operating procedures 65

SPO.SPEC.PAR.105 Carriage of crew members and task specialists 65
SPO.SPEC.PAR.110 Seats 65
SPO.SPEC.PAR.115 Supplemental oxygen 65
SPO.SPEC.PAR.125 Releasing of dangerous goods 65
Section 4 - Aerobatic flights (ABF) 66
SPO.SPEC.ABF.100 Standard operating procedures 66
SPO.SPEC.ABF.105 Documents, manuals and information to be carried 66
SPO.SPEC.ABF.115 Equipment 66

Amendment Record

Amendment No	Date of Issue	Remarks
1	June 2018	Part Rename
2	October 2018	NPA 2018-32, Up to date with EASA Rev 11 (July 2018)
3	Feb 2020	NPA 2019 – 37 (EFB)
4	Mar 2021	NPA 2021-01 (Up to date with EASA Rev 13 (Oct. 2019)

Control of this Document

DC.1 Introduction

DC.1.1 Pursuant to Law No (30) of the year 1960 and subsequent Ministerial Decisions No (3) of the year 1986, No (18) of the year 1990, and No (3) of the year 1996, based upon that Law and as reflected in the Preamble to the Kuwait Civil Aviation Safety Regulations, Issue 4, Rev.2, August 2019, the President of the Kuwait Directorate General of Civil Aviation is empowered to adopt and amend Kuwait Civil Aviation Safety Regulations. In accordance herewith, the following Regulation is hereby established for compliance by all persons concerned. This regulation shall be known as KCASR 6 Part SPO Special Operations and any reference to this title shall mean referring to these regulations governing the requirements to be met for the certification of operations of aircraft.

DC.2 Authority for this Regulation

DC.2.1 This KCASR 6 Part SPO Special Operations is issued on the authority of the President of the Kuwait Directorate General of Civil Aviation.

DC.3 Applicability

DC.3.1 This KCASR 6 Part SPO Special Operations is applicable to the aviation industry of the State of Kuwait.

DC.4 Scope

DC.4.1 KCASR 6 Operation of Aircraft contains the operation of aircraft regulations of the State of Kuwait, and shows compliance with ICAO Annex 6. The regulations in KCASR 6 are separated into the following parts with cross references between parts where applicable.

Part ARO Authority Regulations for Air Operations

Part ORO Organisation Regulations for Air Operations

Part DEF Definitions

Part CAT Commercial Air Transport

Part SPA Specific Approvals

Part SPO Special Operations

Part NCC Non-Commercial with Complex Motor-Powered Aircraft

Part NCO Non-Commercial other than Complex Motor-Powered Aircraft

DC.5 Definitions

DC.5.1 Terms not defined shall have the meaning given to them in the relevant legal instruments or international legal instruments in which they appear, especially as they appear in the Convention and its Annexes.

Part-SPO Specific Operations

SPO.GEN.005 Scope

(a) Specialised operations include the following activities:

(1) helicopter external loads operations;

(2) helicopter survey operations;

(3) human external cargo operations;

(4) parachute operations and skydiving;

(5) agricultural flights;

(6) aerial photography flights;

(7) glider towing;

(8) aerial advertising flights;

(9) calibration flights;

(10) construction work flights, including stringing power line operations, clearing saw operations;

(11) oil spill work;

(12) avalanche mining operations;

(13) survey operations, including aerial mapping operations, pollution control activity;

(14) news media flights, television and movie flights;

(15) special events flights, including such as flying display, competition flights;

(16) animal herding and rescue flights and veterinary dropping flights;

(17) maritime funeral operations;

(18) scientific research flights (other than those under Annex II of the KCASR Basic Regulation);

(19) cloud seeding.

(b) Any other activity falling under the definition of 'specialised operations' shall be regulated by this Part.

Subpart A - General requirements

SPO.GEN.100 Competent Authority

The competent authority shall be the Kuwait DGCA for operators which have their principal place of business or are residing in the State of Kuwait.

SPO.GEN.101 Means of compliance

Alternative means of compliance to those adopted by the Kuwait DGCA may be used by an operator to establish compliance with the Regulations.

SPO.GEN.102 Touring motor gliders and powered sailplanes

(a) Touring motor gliders shall be operated following the requirements for:

(1) aeroplanes when they are power-driven by an engine; and

(2) sailplanes when operated without using an engine.

(b) Touring motor gliders shall be equipped in compliance with the requirements applicable to aeroplanes.

(c) Powered sailplanes shall be operated and equipped in compliance with the requirements applicable to sailplanes.

SPO.GEN.105 Crew responsibilities

(a) The crew member shall be responsible for the proper execution of his/her duties that are specified in the standard operating procedures (SOPs) and, where appropriate, in the operations manual.

(b) During critical phases of flight or whenever deemed necessary by the pilot-in-command in the interest of safety, the crew member shall be restrained at his/her assigned station unless otherwise specified in the SOP.

(c) During flight, the flight crew member shall keep his/her safety belt fastened while at his/her station.

(d) During flight, at least one qualified flight crew member shall remain at the controls of the aircraft at all times.

(e) The crew member shall not undertake duties on an aircraft:

(1) if he/she knows or suspects that he/she is suffering from fatigue as referred to in 7.f. of Annex IV to the KCASR Basic Regulation or feels otherwise unfit to perform his/her duties; or

(2) when under the influence of psychoactive substances or alcohol or for other reasons as referred to in 7.g. of Annex IV to the KCASR Basic Regulation

(f) The crew member who undertakes duties for more than one operator shall:

(1) maintain his/her individual records regarding flight and duty times and rest periods as referred to in Part-ORO, Subpart FTL, if applicable; and

(2) provide each operator with the data needed to schedule activities in accordance with the applicable FTL requirements.

(g) The crew member shall report to the pilot-in-command:

(1) any fault, failure, malfunction or defect, which he/she believes may affect the airworthiness or safe operation of the aircraft, including emergency systems; and

(2) any incident that was endangering, or could endanger, the safety of the operation.

SPO.GEN.106 Task specialists responsibilities

(a) The task specialist shall be responsible for the proper execution of his/her duties that are specified in the standard operating procedures (SOPs).

(b) During critical phases of flight or whenever deemed necessary by the pilot-in-command in the interest of safety, the task specialist shall be restrained at his/her assigned station unless otherwise specified in the SOP.

(c) The task specialist shall ensure that he/she is restrained when carrying out specialised tasks with external doors opened or removed.

(d) The task specialist shall report to the pilot-in-command:

(1) any fault, failure, malfunction or defect, which he/she believes may affect the airworthiness or safe operation of the aircraft, including emergency systems; and

(2) any incident that was endangering, or could endanger, the safety of the operation.

SPO.GEN.107 Pilot-in-command responsibilities and authority

(a) The pilot-in-command shall be responsible for:

(1) the safety of the aircraft and of all crew members, task specialists and cargo on board during aircraft operations;

(2) the initiation, continuation, termination or diversion of a flight in the interest of safety;

(3) ensuring that all operational procedures and checklists are complied with in accordance with the appropriate manual;

(4) only commencing a flight if he/she is satisfied that all operational limitations referred to in 2.a.3 of Annex IV to the KCASR Basic Regulation are complied with, as follows:

(i) the aircraft is airworthy;

(ii) the aircraft is duly registered;

(iii) instruments and equipment required for the execution of that flight are installed in the aircraft and are operative, unless operation with inoperative equipment is permitted by the minimum equipment list (MEL) or equivalent document, if applicable, as required in SPO.IDE.A.105, SPO.IDE.H.105, SPO.IDE.S.105;

(iv) the mass of the aircraft and the centre of gravity location are such that the flight can be conducted within limits prescribed in the airworthiness documentation;

(v) all equipment and baggage is properly loaded and secured; and

(vi) the aircraft operating limitations as specified in the aircraft flight manual (AFM) will not be exceeded at any time during the flight;

(vii) any navigational database required for PBN is suitable and current

(5) not commencing a flight if he/she, or any other crew member or task specialist is incapacitated from performing duties by any cause such as injury, sickness, fatigue or the effects of any psychoactive substance;

(6) not continuing a flight beyond the nearest weather-permissible aerodrome or operating site when his/her or any other crew member or task specialist's capacity to perform duties is significantly reduced from causes such as fatigue, sickness or lack of oxygen;

(7) deciding on acceptance of the aircraft with unserviceability in accordance with the configuration deviation list (CDL) or MEL, if applicable;

(8) recording utilisation data and all known or suspected defects in the aircraft at the termination of the flight, or series of flights, in the aircraft technical log or journey log for the aircraft; and

(9) ensuring that, when installed, flight recorders:

(i) are not disabled or switched off during flight; and

(ii) in the event of an accident or an incident that is subject to mandatory reporting:

(A) are not intentionally erased;

(B) are deactivated immediately after the flight is completed; and

(C) are reactivated only with the agreement of the investigating authority.

(b) The pilot-in-command shall have the authority to refuse carriage of or disembark any person or cargo that may represent a potential hazard to the safety of the aircraft or its occupants.

(c) The pilot-in-command shall, as soon as possible, report to the appropriate air traffic services (ATS) unit any hazardous weather or flight conditions encountered that are likely to affect the safety of other aircraft.

(d) Notwithstanding the provision of (a)(6), in a multi-crew operation the pilot-in- command may continue a flight beyond the nearest weather-permissible aerodrome when adequate mitigating procedures are in place.

(e) The pilot-in-command shall, in an emergency situation that requires immediate decision and action, take any action he/she considers necessary under the circumstances in accordance with 7.d. of Annex IV to the KCASR Basic Regulation. In such cases he/she may deviate from rules, operational procedures and methods in the interest of safety.

(f) The pilot-in-command shall submit a report of an act of unlawful interference without delay to the Kuwait DGCA and shall inform the designated local authority.

(g) The pilot-in-command shall notify the nearest appropriate authority by the quickest available means of any accident involving the aircraft that results in serious injury or death of any person or substantial damage to the aircraft or property.

SPO.GEN.110 Compliance with laws, regulations and procedures

The pilot-in-command, crew members and task specialists shall comply with the laws, regulations and procedures of those States where operations are conducted.

SPO.GEN.115 Common language

The operator shall ensure that all crew members and task specialists are able to communicate with each other in a common language.

SPO.GEN.119 Taxiing of aircraft

The operator shall establish procedures for taxiing of aircraft in order to ensure safe operation and in order to enhance runway safety.

SPO.GEN.120 Taxiing of aeroplanes

The operator shall ensure that an aeroplane is only taxied on the movement area of an aerodrome if the person at the controls:

(a) is an appropriately qualified pilot; or

(b) has been designated by the operator and:

(1) is trained to taxi the aeroplane;

(2) is trained to use the radio telephone, if radio communications are required;

(3) has received instruction in respect of aerodrome layout, routes, signs, marking, lights, air traffic control (ATC) signals and instructions, phraseology and procedures; and

(4) is able to conform to the operational standards required for safe aeroplane movement at the aerodrome.

SPO.GEN.125 Rotor engagement

A helicopter rotor shall only be turned under power for the purpose of flight with a qualified pilot at the controls.

SPO.GEN.130 Portable electronic devices

The operator shall not permit any person to use a portable electronic device (PED) on board an aircraft that could adversely affect the performance of the aircraft's systems and equipment.

SPO.GEN.131 Use of electronic flight bags (EFBs)

(a) Where an EFB is used on board an aircraft, the operator shall ensure that it does not adversely affect the performance of the aircraft systems or equipment, or the ability of the flight crew member to operate the aircraft.

(b) Prior to using a type B EFB application, the operator shall:

(1) conduct a risk assessment related to the use of the EFB device that hosts the application, to the EFB application concerned and its associated function(s), identifying the associated risks and ensuring that they are appropriately mitigated; the risk assessment shall address the risks associated with the human–machine interface of the EFB device and the EFB application concerned; and

(2) establish an EFB administration system, including procedures and training requirements for the administration and use of the EFB device and the EFB application.

SPO.GEN.135 Information on emergency and survival equipment carried

The operator shall, at all times, have available for immediate communication to rescue coordination centres (RCCs) lists containing information on the emergency and survival equipment carried on board.

SPO.GEN.140 Documents, manuals and information to be carried

(a) The following documents, manuals and information shall be carried on each flight as originals or copies unless otherwise specified below:

(1) the AFM, or equivalent document(s);

(2) the original certificate of registration;

(3) the original certificate of airworthiness (CofA);

(4) the noise certificate, if applicable;

(5) a certified true copy of the air operator certificate as specified in Part- ORO, ORO.AOC.100 or declaration as specified in ORO.DEC.100, if applicable;

(6) the list of specific approvals, if applicable;

(7) the aircraft radio licence, if applicable;

(8) the third party liability insurance certificate(s);

(9) the journey log, or equivalent, for the aircraft;

(10) the aircraft technical log, in accordance with Part-M, if applicable;

(11) details of the filed ATS flight plan, if applicable;

(12) current and suitable aeronautical charts for the route/area of the proposed flight and all routes along which it is reasonable to expect that the flight may be diverted;

(13) procedures and visual signals information for use by intercepting and intercepted aircraft;

(14) information concerning search and rescue services for the area of the intended flight;

(15) the current parts of the operations manual and/or SOPs or AFM that are relevant to the duties of crew members and task specialists, which shall be easily accessible to them;

(16) the MEL or CDL, if applicable;

(17) appropriate notices to airmen (NOTAMs) and aeronautical information service (AIS) briefing documentation;

(18) appropriate meteorological information, if applicable;

(19) cargo manifests, if applicable; and

(20) any other documentation that may be pertinent to the flight or is required by the States concerned with the flight.

(b) Notwithstanding (a), on flights:

(1) intending to take off and land at the same aerodrome or operating site; or

(2) remaining within a distance or area determined by the Kuwait DGCA, the documents and information in (a)(2) to (a)(11) and (a)(14), (a)(17), (a)(18 and (a)(19) may be retained at the aerodrome or operating site.

(c) Notwithstanding (a), on flights with sailplanes, excluding touring motor gliders (TMGs), the documents and information in (a)(1) to (a)(10) and (a)(13) to (a)(19) may be carried in the retrieve vehicle.

(d) In case of loss or theft of documents specified in (a)(2) to (a)(8), the operation may continue until the flight reaches its destination or a place where replacement documents can be provided.

(e) The operator shall make available, within a reasonable time of being requested to do so by the Kuwait DGCA, the documentation required to be carried on board.

SPO.GEN.145 Preservation, production and use of flight recorder recordings - operations with complex motor-powered aircraft

(a) Following an accident or an incident that is subject to mandatory reporting, the operator of an aircraft shall preserve the original recorded data for a period of 60 days unless otherwise directed by the investigating authority.

(b) The operator shall conduct operational checks and evaluations of flight data recorder (FDR) recordings, cockpit voice recorder (CVR) recordings and data link recordings to ensure the continued serviceability of the recorders.

(c) The operator shall save the recordings for the period of operating time of the FDR as required by SPO.IDE.A.145 or SPO.IDE.H.145, except that, for the purpose of testing and maintaining the FDR, up to 1 hour of the oldest recorded material at the time of testing may be erased.

(d) The operator shall keep and maintain up-to-date documentation that presents the necessary information to convert FDR raw data into parameters expressed in engineering units.

(e) The operator shall make available any flight recorder recording that has been preserved, if so determined by the Kuwait DGCA.

(f) CVR recordings shall not be disclosed or used unless:

(1) a procedure related to the handling of CVR recordings and of their transcript is in place;

(2) all crew members and maintenance personnel concerned have given their prior consent; and

(3) they are used only for maintaining or improving safety.

When a CVR recording is inspected for ensuring the CVR serviceability, the operator shall ensure the privacy of the CVR recording and the CVR recording shall not be disclosed or used for other purposes than ensuring the CVR serviceability.

(g) FDR recordings or data link recordings shall only be used for purposes other than for the investigation of an accident or an incident that is subject to mandatory reporting if such records are:

(1) used by the operator for airworthiness or maintenance purposes only;

(2) de-identified; or

(3) disclosed under secure procedures.

SPO.GEN.150 Transport of dangerous goods

(a) The transport of dangerous goods by air shall be conducted in accordance with Annex 18 to the Chicago Convention as last amended and amplified by the Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284-AN/905), including its attachments, supplements and any other addenda or corrigenda.

(b) Dangerous goods shall only be transported by an operator approved in accordance with Part-SPA, subpart G, except when:

(1) they are not subject to the Technical Instructions in accordance with Part 1 of those Instructions;

(2) they are carried by task specialists or crew members or are in baggage which has been separated from its owner, in accordance with Part 8 of the Technical Instructions;

(3) required on board the aircraft for specialised purposes in accordance with the Technical Instructions.;

(4) they are used to facilitate flight safety where carriage aboard the aircraft is reasonable to ensure their timely availability for operational purposes, whether or not such articles and substances are required to be carried or intended to be used in connection with a particular flight.

(c) The operator shall establish procedures to ensure that all reasonable measures are taken to prevent dangerous goods from being carried on board inadvertently.

(d) The operator shall provide personnel with the necessary information enabling them to carry out their responsibilities, as required by the Technical Instructions.

(e) The operator shall, in accordance with the Technical Instructions, report without delay to the Kuwait DGCA and the appropriate authority of the State of occurrence in the event of:

(1) any dangerous good accident or incidents;

(2) the finding of dangerous goods carried by task specialists or crew, or in their baggage, when not in accordance with Part 8 of the Technical Instructions.

(f) The operator shall ensure that task specialists are provided with information about dangerous goods.

(g) The operator shall ensure that notices giving information about the transport of dangerous goods are provided at acceptance points for cargo as required by the Technical Instructions.

SPO.GEN.155 Release of dangerous goods

The operator shall not operate an aircraft over congested areas of cities, towns or settlements or over an open-air assembly of persons when releasing dangerous goods.

SPO.GEN.160 Carriage and use of weapons

(a) The operator shall ensure that, when weapons are carried on a flight for the purpose of a specialised task, these are secured when not in use.

(b) The task specialist using the weapon shall take all necessary measures to prevent the aircraft and persons on board or on the ground from being endangered.

SPO.GEN.165 Admission to the flight crew compartment

The pilot-in-command shall make the final decision regarding the admission to the flight crew compartment and shall ensure that:

(a) admission to the flight crew compartment does not cause distraction or interference with the operation of the flight; and

(b) all persons carried in the flight crew compartment are made familiar with the relevant safety procedures.

Subpart B - Operational procedures

SPO.OP.100 Use of aerodromes and operating sites

The operator shall only use aerodromes and operating sites that are adequate for the type of aircraft and operation concerned.

SPO.OP.105 Specification of isolated aerodromes - aeroplanes

For the selection of alternate aerodromes and the fuel policy, the operator shall consider an aerodrome as an isolated aerodrome if the flying time to the nearest adequate destination alternate aerodrome is more than:

(a) for aeroplanes with reciprocating engines, 60 minutes; or

(b) for aeroplanes with turbine engines, 90 minutes.

SPO.OP.110 Aerodrome operating minima - aeroplanes and helicopters

(a) For instrument flight rules (IFR) flights, the operator or the pilot-in-command shall specify aerodrome operating minima for each departure, destination and alternate aerodrome to be used. Such minima shall:

(1) not be lower than those established by the State in which the aerodrome is located, except when specifically approved by that State; and

(2) when undertaking low visibility operations, be approved by the Kuwait DGCA in accordance with Part-SPA, Subpart E.

(b) When establishing the aerodrome operating minima, the operator or the pilot-in- command shall take the following into account:

(1) the type, performance and handling characteristics of the aircraft;

(2) the competence and experience of the flight crew and, if applicable, its composition;

(3) the dimensions and characteristics of the runways and final approach and take-off areas (FATOs) that may be selected for use;

(4) the adequacy and performance of the available visual and non-visual ground aids;

(5) the equipment available on the aircraft for the purpose of navigation and/or control of the flight path, during the take-off, the approach, the flare, the landing, the rollout and the missed approach;

(6) the obstacles in the approach, the missed approach and the climb-out areas required for the execution of contingency procedures;

(7) the obstacle clearance altitude/height for the instrument approach procedures;

(8) the means to determine and report meteorological conditions; and

(9) the flight technique to be used during the final approach.

(c)The minima for a specific type of approach and landing procedure shall be used if:

(1) the ground equipment required for the intended procedure is operative;

(2) the aircraft systems required for the type of approach are operative;

(3) the required aircraft performance criteria are met; and

(4) the flight crew is qualified appropriately.

SPO.OP.111 Aerodrome operating minima — NPA, APV, CAT I operations

(a) The decision height (DH) to be used for a non-precision approach (NPA) flown with the continuous descent final approach (CDFA) technique, approach procedure with vertical guidance (APV) or category I (CAT I) operation shall not be lower than the highest of:

(1) the minimum height to which the approach aid can be used without the required visual reference;

(2) the obstacle clearance height (OCH) for the category of aircraft;

(3) the published approach procedure DH where applicable;

(4) the system minimum specified in Table 1; or

(5) the minimum DH specified in the AFM or equivalent document, if stated.

(b) The minimum descent height (MDH) for an NPA operation flown without the CDFA technique shall not be lower than the highest of:

(1) the OCH for the category of aircraft;

(2) the system minimum specified in Table 1; or

(3) the minimum MDH specified in the AFM, if stated.

Table 1: System minima

Facility	Lowest DH/MDH (ft)
Instrument landing system (ILS)	200
Global navigation satellite system (GNSS)/ satellite- based augmentation system (SBAS) (lateral precision with vertical guidance approach (LPV))	200
GNSS (lateral navigation (LNAV))	250
GNSS/Baro-vertical navigation (VNAV) (LNAV/ VNAV)	250
Localiser (LOC) with or without distance measuring	250
Surveillance radar approach (SRA) (terminating at ½ NM)	250
SRA (terminating at 1 NM)	300
SRA (terminating at 2 NM or more)	350
VHF omnidirectional radio range (VOR)	300
VOR/DME	250
Non-directional beacon (NDB)	350
NDB/DME	300
VHF direction finder (VDF)	350

SPO.OP.112 Aerodrome operating minima - circling operations with aeroplanes

(a) The MDH for a circling operation with aeroplanes shall not be lower than the highest of:

(1) the published circling OCH for the aeroplane category;

(2) the minimum circling height derived from Table 1; or

(3) the DH/MDH of the preceding instrument approach procedure.

(b) The minimum visibility for a circling operation with aeroplanes shall be the highest of:

(1) the circling visibility for the aeroplane category, if published;

(2) the minimum visibility derived from Table 2; or

(3) the runway visual range / converted meteorological visibility (RVR/CMV) of the preceding instrument approach procedure.

Table 1: MDH and minimum visibility for circling vs. aeroplane category

	Aeroplane category			
	A	B	C	D
MDH (ft)	400	500	600	700
Minimum meteorological visibility (m)	1500	1600	2400	3600

SPO.OP.113 Aerodrome operating minima - onshore circling operations with helicopters

The MDH for an onshore circling operation with helicopters shall not be lower than 250 ft and the meteorological visibility not less than 800 m.

SPO.OP.115 Departure and approach procedures - aeroplanes and helicopters

(a) The pilot-in-command shall use the departure and approach procedures established by the State of the aerodrome, if such procedures have been published for the runway or FATO to be used.

(b) The pilot-in-command may deviate from a published departure route, arrival route or approach procedure:

(1) provided obstacle clearance criteria can be observed, full account is taken of the operating conditions and any ATC clearance is adhered to; or

(2) when being radar-vectored by an ATC unit.

(c) In the case of operations with complex motor-powered aircraft, the final approach segment shall be flown visually or in accordance with the published approach procedures.

SPO.OP.116 Performance-based navigation — aeroplanes and helicopters

The operator shall ensure that, when PBN is required for the route or procedure to be flown:

(a) the relevant PBN specification is stated in the AFM or other document that has been approved by the certifying authority as part of an airworthiness assessment or is based on such approval; and

(b) the aircraft is operated in conformance with the relevant navigation specification and limitations in the AFM or other document mentioned above.

SPO.OP.120 Noise abatement procedures

The pilot-in-command shall take into account published noise abatement procedures to minimise the effect of aircraft noise while ensuring that safety has priority over noise abatement.

SPO.OP.125 Minimum obstacle clearance altitudes - IFR flights

(a) The operator shall specify a method to establish minimum flight altitudes that provide the required terrain clearance for all route segments to be flown in IFR.

(b) The pilot-in-command shall establish minimum flight altitudes for each flight based on this method. The minimum flight altitudes shall not be lower than those published by the State overflown.

SPO.OP.130 Fuel and oil supply - aeroplanes

(a) The pilot-in-command shall only commence a flight if the aeroplane carries sufficient fuel and oil for the following:

(1) for VFR flights:

(i) by day, to fly to the aerodrome of intended landing and thereafter to fly for at least 30 minutes at normal cruising altitude; or

(ii) by night, to fly to the aerodrome of intended landing and thereafter to fly for at least 45 minutes at normal cruising altitude;

(2) for IFR flights:

(i) when no destination alternate is required, to fly to the aerodrome of intended landing and thereafter to fly for at least 45 minutes at normal cruising altitude; or

(ii) when a destination alternate is required, to fly to the aerodrome of intended landing, to an alternate aerodrome and thereafter to fly for at least 45 minutes at normal cruising altitude.

(b) In computing the fuel required, including to provide for contingency, the following shall be taken into consideration:

(1) forecast meteorological conditions;

(2) anticipated ATC routings and traffic delays;

(3) procedures for loss of pressurisation or failure of one engine while en-route, where applicable; and

(4) any other condition that may delay the landing of the aeroplane or increase fuel and/or oil consumption.

(c) Nothing shall preclude amendment of a flight plan in-flight, in order to re-plan the flight to another destination, provided that all requirements can be complied with from the point where the flight is re-planned

SPO.OP.131 Fuel and oil supply - helicopters

(a) The pilot-in-command shall only commence a flight if the helicopter carries sufficient fuel and oil for the following:

(1) for VFR flights:

(i) to fly to the aerodrome/operating site of intended landing and thereafter to fly for at least 20 minutes at best-range-speed; or

(ii) for flights remaining within 25 NM of the aerodrome/operating site of departure reserve fuel shall not be less than 10 minutes fuel at best- range-speed; and

(2) for IFR flights:

(i) when no alternate is required or no weather-permissible alternate aerodrome is available, to fly to the aerodrome/operating site of intended landing, and thereafter to fly for 30 minutes at normal cruising speed at 450 m (1500 ft) above the destination aerodrome/operating site under standard temperature conditions and approach and land; or

(ii) when an alternate is required, to fly to and execute an approach and a missed approach at the aerodrome/operating site of intended landing, and thereafter:

(A) to fly to the specified alternate; and

(B) to fly for 30 minutes at normal holding speed at 450 m (1500 ft) above the alternate aerodrome/operating site under standard temperature conditions and approach and land.

(b) In computing the fuel required, including to provide for contingency, the following shall be taken into consideration:

(1) forecast meteorological conditions;

(2) anticipated ATC routings and traffic delays;

(3) failure of one engine while en-route, where applicable; and

(4) any other condition that may delay the landing of the aircraft or increase fuel and/or oil consumption.

(c) Nothing shall preclude amendment of a flight plan in-flight, in order to re-plan the flight to another destination, provided that all requirements can be complied with from the point where the flight is re-planned.

SPO.OP.135 Safety briefing

(a) The operator shall ensure that, prior to take-off task specialists are given a briefing on:

(1) emergency equipment and procedures;

(2) operational procedures associated with the specialised task before each flight or series of flights

(b) The briefing referred to in (a)(2) may be replaced by an initial and recurrent training programme. In such case the operator shall also define recency requirements.

SPO.OP.140 Flight preparation

(a) Before commencing a flight, the pilot-in-command shall ascertain by every reasonable means available that the ground and/or water facilities including communication facilities and navigation aids available and directly required on such flight, for the safe operation of the aircraft, are adequate for the type of operation under which the flight is to be conducted.

(b) Before commencing a flight, the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for a flight away from the vicinity of the place of departure, and for every flight under IFR, shall include:

(1) a study of available current weather reports and forecasts; and

(2) the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions.

SPO.OP.145 Take-off alternate aerodromes - complex motor-powered aeroplanes

(a) For IFR flights, the pilot-in-command shall specify at least one weather-permissible take-off alternate aerodrome in the flight plan if the weather conditions at the aerodrome of departure are at or below the applicable aerodrome operating minima or it would not be possible to return to the aerodrome of departure for other reasons.

(b) The take-off alternate aerodrome shall be located within the following distance from the aerodrome of departure:

(1) for aeroplanes having two engines, not more than a distance equivalent to a flight time of 1 hour at the single-engine cruise speed in still air standard conditions; and

(2) for aeroplanes having three or more engines, not more than a distance equivalent to a flight time of 2 hours at the one-engine-inoperative (OEI) cruise speed according to the AFM in still air standard conditions.

(c) For an aerodrome to be selected as a take-off alternate aerodrome the available information shall indicate that, at the estimated time of use, the conditions will be at or above the aerodrome operating minima for that operation.

SPO.OP.150 Destination alternate aerodromes - aeroplanes

For IFR flights, the pilot-in-command shall specify at least one weather-permissible destination alternate aerodrome in the flight plan, unless:

(a) the available current meteorological information indicates that, for the period from 1 hour before until 1 hour after the estimated time of arrival, or from the actual time of departure to 1 hour after the estimated time of arrival, whichever is the shorter period, the approach and landing may be made under visual meteorological conditions (VMC); or

(b) the place of intended landing is isolated and:

(1) an instrument approach procedure is prescribed for the aerodrome of intended landing; and

(2) available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival, or from the actual time of departure to 2 hours after the estimated time of arrival whichever is the shorter period:

(i) a cloud base of at least 300 m (1000 ft) above the minimum associated with the instrument approach procedure; and

(ii) visibility of at least 5.5 km or of 4 km more than the minimum associated with the procedure.

SPO.OP.151 Destination alternate aerodromes - helicopters

For IFR flights, the pilot-in-command shall specify at least one weather-permissible destination alternate aerodrome in the flight plan, unless:

(a) an instrument approach procedure is prescribed for the aerodrome of intended landing and the available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival, or from the actual time of departure to 2 hours after the estimated time of arrival, whichever is the shorter period:

(1) a cloud base of at least 120 m (400 ft) above the minimum associated with the instrument approach procedure; and

(2) visibility of at least 1500 m more than the minimum associated with the procedure; or

(b) the place of intended landing is isolated and:

(1) an instrument approach procedure is prescribed for the aerodrome of intended landing;

(2) available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival:

(i) the cloud base is at least 120 m (400 ft) above the minimum associated with the instrument approach procedure;

(ii) visibility is at least 1500 m more than the minimum associated with the procedure.

SPO.OP.152 Destination aerodromes — instrument approach operations

The pilot-in-command shall ensure that sufficient means are available to navigate and land at the destination aerodrome or at any destination alternate aerodrome in the case of loss of capability for the intended approach and landing operation.

SPO.OP.155 Refuelling with persons embarking, on board or disembarking

(a) The aircraft shall not be refuelled with aviation gasoline (AVGAS) or wide-cut type fuel or a mixture of these types of fuel, when persons are embarking, on board or disembarking.

(b) For all other types of fuel, necessary precautions shall be taken and the aircraft shall be properly manned by qualified personnel ready to initiate and direct an evacuation of the aircraft by the most practical and expeditious means available.

SPO.OP.160 Use of headset

Each flight crew member required to be on duty in the flight crew compartment, shall wear a headset with boom microphone or equivalent and shall use it as the primary device of communication with ATC and task specialists bellow 10,000 ft. AGL or transition altitude/level

whichever is higher. Headset with boom microphone or equivalent shall be used at all times when a single pilot is in the flight crew compartment.

SPO.OP.165 Smoking

The pilot-in-command shall not allow smoking on board at all times.

SPO.OP.170 Meteorological conditions

(a) The pilot-in-command shall only commence or continue a VFR flight if the latest available meteorological information indicates that the weather conditions along the route and at the intended destination at the estimated time of use will be at or above the applicable VFR operating minima.

(b) The pilot-in-command shall only commence or continue an IFR flight towards the planned destination aerodrome if the latest available meteorological information indicates that, at the estimated time of arrival, the weather conditions at the destination or at least one destination alternate aerodrome are at or above the applicable aerodrome operating minima.

(c) If a flight contains VFR and IFR segments, the meteorological information referred to in (a) and (b) shall be applicable as far as relevant.

SPO.OP.175 Ice and other contaminants - ground procedures

(a) The pilot-in-command shall only commence take-off if the aircraft is clear of any deposit that might adversely affect the performance or controllability of the aircraft, except as permitted in the AFM.

(b) In the case of operations with complex motor-powered aircraft, the operator shall establish procedures to be followed when ground de-icing and anti-icing and related inspections of the aircraft are necessary to allow the safe operation of the aircraft.

SPO.OP.176 Ice and other contaminants - flight procedures

(a) The pilot-in-command shall only commence a flight or intentionally fly into expected or actual icing conditions if the aircraft is certified and equipped to cope with such conditions as referred to in 2.a.5 of Annex IV to the KCASR Basic Regulation.

(b) If icing exceeds the intensity of icing for which the aircraft is certified or if an aircraft not certified for flight in known icing conditions encounters icing, the pilot-in- command shall exit the icing conditions without delay, by a change of level and/or route, and if necessary by declaring an emergency to ATC.

(c) In the case of operations with complex motor-powered aircraft, the operator shall establish procedures for flights in expected or actual icing conditions.

SPO.OP.180 Take-off conditions - aeroplanes and helicopters

Before commencing take-off, the pilot-in-command shall be satisfied that:

(a) according to the information available, the weather at the aerodrome or operating site and the condition of the runway or FATO intended to be used would not prevent a safe take-off and departure; and

(b) applicable aerodrome operating minima will be complied with.

SPO.OP.185 Simulated abnormal situations in flight

Unless a task specialist is on-board the aircraft for training, the pilot-in-command shall, when carrying task specialists, not simulate:

(a) abnormal or emergency situations that require the application of abnormal or emergency procedures; or

(b) flight in instrument meteorological conditions (IMC) by artificial means.

SPO.OP.190 In-flight fuel management

(a) The operator of a complex motor-powered aircraft shall ensure that in-flight fuel checks and fuel management are performed.

(b) The pilot-in-command shall check at regular intervals that the amount of usable fuel remaining in flight is not less than the fuel required to proceed, with the planned reserve fuel remaining as required by SPO.OP.130 and SPO.OP.131, to a weather- permissible aerodrome or operating site.

SPO.OP.195 Use of supplemental oxygen

(a) The operator shall ensure that task specialists and crew members use supplemental oxygen continuously whenever the cabin altitude exceeds 10000 ft for a period of more than 30 minutes and whenever the cabin altitude exceeds 13000 ft, unless otherwise approved by the Kuwait DGCA and in accordance with SOPs.

(b) Notwithstanding (a) and except for parachute operations, short excursions of a specified duration above 13000 ft without using supplemental oxygen on other-than-complex aeroplanes and helicopters may be undertaken with a prior approval of the Kuwait DGCA based on the consideration of the following:

(1) the duration of the excursion above 13000 ft is not more than 10 minutes or, if needed for a longer period, the time strictly necessary to the accomplishment of the specialised task;

(2) the flight is not conducted above 16000 ft;

(3) the safety briefing in accordance with SPO.OP.135 includes adequate information to crew members and tasks specialists on the effects of hypoxia;

(4) SOPs for the concerned operation reflecting (1), (2) and (3);

(5) the previous experience of the operator in conducting operations above 13000 ft without using supplemental oxygen;

(6) the individual experience of crew members and task specialists and their physiological adaptation to high altitudes; and

(7) the altitude of the base where the operator is established or the operations are conducted from.

SPO.OP.200 Ground proximity detection

(a) When undue proximity to the ground is detected by a flight crew member or by a ground proximity warning system, the pilot flying shall take corrective action immediately in order to establish safe flight conditions.

(b) The ground proximity warning system may be disabled during those specialised tasks, which by their nature require the aircraft to be operated within a distance from the ground below that which would trigger the ground proximity warning system.

SPO.OP.205 Airborne collision avoidance system (ACAS)

(a) The operator shall establish operational procedures and training programmes when ACAS is installed and serviceable. When ACAS II is used, such procedures and training shall be in accordance with ICAO Doc 9863.

(b) The ACAS II may be disabled during those specialised tasks, which by their nature require the aircraft to be operated within a distance from each other below that which would trigger the ACAS.

SPO.OP.210 Approach and landing conditions - aeroplanes

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the runway intended to be used would not prevent a safe approach, landing or missed approach.

SPO.OP.211 Approach and landing conditions – helicopters

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the final approach and take-off area (FATO) intended to be used would not prevent a safe approach, landing or missed approach.

SPO.OP.215 Commencement and continuation of approach - aeroplanes and helicopters

(a) The pilot-in-command may commence an instrument approach regardless of the reported runway visual range/visibility (RVR/VIS).

(b) If the reported RVR/VIS is less than the applicable minimum, the approach shall not be continued:

(1) below 1000 ft above the aerodrome; or

(2) into the final approach segment in the case where the decision altitude/height (DA/H) or minimum descent altitude/height (MDA/H) is more than 1000 ft above the aerodrome,

(c) Where the RVR is not available, RVR values may be derived by converting the reported visibility.

(d) If, after passing 1000 ft above the aerodrome, the reported RVR/VIS falls below the applicable minimum, the approach may be continued to DA/H or MDA/H.

(e) The approach may be continued below DA/H or MDA/H and the landing may be completed provided that the visual reference adequate for the type of approach operation and for the intended runway is established at the DA/H or MDA/H and is maintained.

(f) The touchdown zone RVR shall always be controlling.

SPO.OP.230 Standard operating procedures

(a) Before commencing a specialised operation, the operator shall conduct a risk assessment, assessing the complexity of the activity to determine the hazards and associated risks inherent in the operation and establish mitigating measures.

(b) Based on the risk assessment, the operator shall establish standard operating procedures (SOP) appropriate to the specialised activity and aircraft used taking account of the requirements of subpart E. The (SOP) shall be part of the operations manual or a separate document. SOP shall be regularly reviewed and updated, as appropriate.

(c) The operator shall ensure that specialised operations are performed in accordance with SOP.

Subpart C - Aircraft performance and operating limitations

SPO.POL.100 Operating limitations - all aircraft

(a) During any phase of operation, the loading, the mass and the centre of gravity (CG) position of the aircraft shall comply with any limitation specified in the appropriate manual.

(b) Placards, listings, instrument markings, or combinations thereof, containing those operating limitations prescribed by the AFM for visual presentation, shall be displayed in the aircraft.

SPO.POL.105 Mass and balance

(a) The operator shall ensure that the mass and the CG of the aircraft have been established by actual weighing prior to initial entry into service. The accumulated effects of modifications and repairs on the mass and balance shall be accounted for and properly documented. Such information shall be made available to the pilot-in-command. The aircraft shall be reweighed if the effect of modifications on the mass and balance is not accurately known

(b) The weighing shall be accomplished by the manufacturer of the aircraft or by an approved maintenance organisation.

SPO.POL.110 Mass and balance system - commercial operations with aeroplanes and helicopters and non-commercial operations with complex motor-powered aircraft

(a) The operator shall establish a mass and balance system specifying how the following items are determined for each flight or series of flights:

(1) aircraft dry operating mass;

(2) mass of the traffic load;

(3) mass of the fuel load;

(4) aircraft load and load distribution;

(5) take-off mass, landing mass and zero fuel mass; and

(6) applicable aircraft CG positions.

(b) The flight crew shall be provided with a means of replicating and verifying any mass and balance computation based on electronic calculations.

(c) The operator shall establish procedures to enable the pilot-in-command to determine the mass of the fuel load by using the actual density or, if not known, the density calculated in accordance with a method specified in the operations manual.

(d) The pilot-in-command shall ensure that the loading of:

(1) the aircraft is performed under the supervision of qualified personnel; and

(2) traffic load is consistent with the data used for the calculation of the aircraft mass and balance.

(e) The operator shall specify, in the operations manual, the principles and methods involved in the loading and in the mass and balance system that meet the requirements contained in (a) to (d). This system shall cover all types of intended operations.

SPO.POL.115 Mass and balance data and documentation - commercial operations with aeroplanes and helicopters and non-commercial operations with complex motor- powered aircraft

(a) The operator shall establish mass and balance data and produce mass and balance documentation prior to each flight, or series of flights, specifying the load and its distribution in such a way that the mass and balance limits of the aircraft are not exceeded. The mass and balance documentation shall contain the following information:

(1) aircraft registration and type;

(2) flight identification, number and date, as applicable;

(3) name of the pilot-in-command;

(4) name of the person who prepared the document;

(5) dry operating mass and the corresponding CG of the aircraft;

(6) mass of the fuel at take-off and the mass of trip fuel;

(7) mass of consumables other than fuel, if applicable;

(8) load components;

(9) take-off mass, landing mass and zero fuel mass;

(10) applicable aircraft CG positions; and

(11) the limiting mass and CG values.

(b) Where mass and balance data and documentation is generated by a computerised mass and balance system, the operator shall verify the integrity of the output data.

SPO.POL.116 Mass and balance data and documentation - alleviations

Notwithstanding SPO.POL.115 (a)(5), the CG position may not need not be on the mass and balance documentation, if the load distribution is in accordance with a pre-calculated balance table or if it can be shown that for the planned operations a correct balance can be ensured, whatever the real load is.

SPO.POL.120 Performance - general

The pilot-in-command shall only operate the aircraft if the performance is adequate to comply with the applicable rules of the air and any other restrictions applicable to the flight, the airspace or the aerodromes or operating sites used, taking into account the charting accuracy of any charts and maps used.

SPO.POL.125 Take-off mass limitations - complex motor-powered aeroplanes

The operator shall ensure that:

(a) the mass of the aeroplane at the start of take-off shall not exceed the mass limitations:

(1) at take-off, as required in SPO.POL.130;

(2) en-route with one engine inoperative (OEI), as required in SPO.POL.135; and

(3) at landing, as required in SPO.POL.140,

allowing for expected reductions in mass as the flight proceeds, and for fuel jettisoning;

(b) the mass at the start of take-off shall never exceed the maximum take-off mass specified in the AFM for the pressure altitude appropriate to the elevation of the aerodrome or operating site, and if used as a parameter to determine the maximum take- off mass, any other local atmospheric condition; and

(c) the estimated mass for the expected time of landing at the aerodrome or operating site of intended landing and at any destination alternate aerodrome shall never exceed the maximum landing mass specified in the AFM for the pressure altitude appropriate to the elevation of those aerodromes or operating sites and if used as a parameter to determine the maximum landing mass, any other local atmospheric condition.

SPO.POL.130 Take-off - complex motor-powered aeroplanes

(a) When determining the maximum take-off mass, the pilot-in-command shall take the following into account:

(1) the calculated take-off distance shall not exceed the take-off distance available with a clearway distance not exceeding half of the take-off run available;

(2) the calculated take-off run shall not exceed the take-off run available;

(3) a single value of V1 shall be used for the rejected and continued take-off, where a V_1 is specified in the AFM; and

(4) on a wet or contaminated runway, the take-off mass shall not exceed that permitted for a take-off on a dry runway under the same conditions.

(b) In the event of an engine failure during take-off, the pilot-in-command shall ensure that:

(1) for the aeroplane where a V_1 is specified in the AFM, the aeroplane shall be able to discontinue the take-off and stop within the accelerate-stop distance available; and

(2) for the aeroplane where a net take-off flight path is specified in the AFM, the aeroplane shall be able to continue the take-off and clear all obstacles along the flight path by an adequate margin until the aeroplane is in a position to comply with SPO.POL.135.

SPO.POL.135 En-route - one engine inoperative - complex motor-powered aeroplanes

The pilot-in-command shall ensure that in the event of an engine becoming inoperative at any point along the route, a multi-engined aeroplane shall be able to continue the flight to an adequate aerodrome or operating site without flying below the minimum obstacle clearance altitude at any point.

SPO.POL.140 Landing - complex motor-powered aeroplanes

The pilot-in-command shall ensure that at any aerodrome or operating site, after clearing all obstacles in the approach path by a safe margin, the aeroplane shall be able to land and stop,

or a seaplane to come to a satisfactory low speed, within the landing distance available. Allowance shall be made for expected variations in the approach and landing techniques, if such allowance has not been made in the scheduling of performance data.

SPO.POL.145 Performance and operating criteria - aeroplanes

When operating an aeroplane at a height of less than 150 m (500 ft) above a non-congested area, for operations of aeroplanes that are not able to sustain level flight in the event of a critical engine failure, the operator shall:

(a) establish operational procedures to minimise the consequences of an engine failure;

(b) establish a training programme for crew members; and

(c) ensure that all crew members and task specialists on board are briefed on the procedures to be carried out in the event of a forced landing.

SPO.POL.146 Performance and operating criteria - helicopters

(a) Notwithstanding SPO.POL.120(b), the pilot-in-command may operate an aircraft over congested areas provided that:

  (1) the helicopter is certified in category A or B; and

  (2) safety measures are established to prevent undue hazard to persons or property on the ground and the operation and its SOP is approved

(b) The operator shall:

  (1) establish operational procedures to minimise the consequences of an engine failure;

  (2) establish a training programme for crew members; and

  (3) ensure that all crew members and task specialists on board are briefed on the procedures to be carried out in the event of a forced landing.

(c) The operator shall ensure that the mass at take-off, landing or hover shall not exceed the maximum mass specified for:

  (1) a hover out of ground effect (HOGE) with all engines operating at the appropriate power rating; or

  (2) if conditions prevail that a HOGE is not likely to be established, the helicopter mass shall not exceed the maximum mass specified for a hover in ground effect (HIGE) with all engines operating at the appropriate power rating, provided prevailing conditions allow a hover in ground effect at the maximum specified mass.

Subpart D - Instruments, data and equipment

Section 1 - Aeroplanes

SPO.IDE.A.100 Instruments and equipment - general

(a) Instruments and equipment required by this Subpart shall be approved in accordance with the applicable airworthiness requirements if they are:

(1) used by the flight crew to control the flight path,

(2) used to comply with SPO.IDE.A.215;

(3) used to comply with SPO.IDE.A.220; or

(4) installed in the aeroplane.

(b) The following items, when required by this Subpart, do not need an equipment approval:

(1) spare fuses,

(2) independent portable lights,

(3) an accurate time piece,

(4) chart holder,

(5) first-aid kits,

(6) survival and signalling equipment, and

(7) sea anchor and equipment for mooring.

(8) a simple PCDS used by a task specialist as a restraint device.

(c) Instruments and equipment not required by this Subpart as well as any other equipment that is not required by other applicable Parts, but is carried on a flight, shall comply with the following:

(1) the information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply with Annex I to the KCASR Basic Regulation or SPO.IDE.A.215 and SPO.IDE.A.220;

(2) the instruments and equipment shall not affect the airworthiness of the aeroplane, even in the case of failures or malfunction.

(d) Instruments and equipment shall be readily operable or accessible from the station where the flight crew member that needs to use it is seated.

(e) Those instruments that are used by a flight crew member shall be so arranged as to permit the flight crew member to see the indications readily from his/her station, with the minimum practicable deviation from the position and line of vision which he/she normally assumes when looking forward along the flight path.

(f) All required emergency equipment shall be easily accessible for immediate use.

SPO.IDE.A.105 Minimum equipment for flight

A flight shall not be commenced when any of the aeroplane's instruments, items of equipment or functions required for the intended flight are inoperative or missing, unless:

(a) the aeroplane is operated in accordance with the minimum equipment list (MEL), if established;

(b) for complex-motor-powered aeroplanes and for any aeroplane used in commercial operations, the operator is approved by the Kuwait DGCA to operate the aeroplane within the constraints of the master minimum equipment list (MMEL); in accordance with point ORO.MLR.105(j) of this part ; or

(c) the aeroplane is subject to a permit to fly issued in accordance with the applicable airworthiness requirements.

SPO.IDE.A.110 Spare electrical fuses

Aeroplanes shall be equipped with spare electrical fuses, of the ratings required for complete circuit protection, for replacement of those fuses that are allowed to be replaced in flight.

SPO.IDE.A.115 Operating lights

Aeroplanes operated at night shall be equipped with:

(a) an anti-collision light system;

(b) navigation/position lights;

(c) a landing light;

(d) lighting supplied from the aeroplane's electrical system to provide adequate illumination for all instruments and equipment essential to the safe operation of the aeroplane;

(e) lighting supplied from the aeroplane's electrical system to provide illumination in all cabin compartments;

(f) an independent portable light for each crew member station; and

(g) lights to conform with the International Regulations for Preventing Collisions at Sea if the aeroplane is operated as a seaplane.

SPO.IDE.A.120 Operations under VFR - flight and navigational instruments and associated equipment

(a) Aeroplanes operated under VFR by day shall be equipped with a means of measuring and displaying the following:

(1) magnetic heading,

(2) time in hours, minutes and seconds,

(3) pressure altitude,

(4) indicated airspeed,

(5) Mach number whenever speed limitations are expressed in terms of Mach number, and

(6) slip for complex motor-powered aeroplanes.

(b) Aeroplanes operating under VMC at night shall be, in addition to (a), equipped with:

(1) a means of measuring and displaying the following:

(i) turn and slip,

(ii) attitude,

(iii) vertical speed, and

(iv) stabilised heading;

(2) a means of indicating when the supply of power to the gyroscopic instruments is not adequate;

(3) for complex motor-powered aeroplanes, a means of preventing malfunction of the airspeed indicating system required in (a)(4) due to condensation or icing.

(c) Complex motor-powered aeroplanes operating under VMC over water and out of sight of the land shall be, in addition to (a) and (b), equipped with a means of preventing malfunction of the airspeed indicating system due to condensation or icing.

(d) Aeroplanes operated in conditions where they cannot be maintained in a desired flight path without reference to one or more additional instruments, shall be, in addition to (a) and (b), equipped with a means of preventing malfunction of the airspeed indicating system required in (a)(4) due to condensation or icing.

(e) Whenever two pilots are required for the operation, aeroplanes shall be equipped with an additional separate means of displaying the following:

(1) pressure altitude,

(2) indicated airspeed,

(3) slip, or turn and slip, as applicable,

(4) attitude, if applicable,

(5) vertical speed, if applicable

(6) stabilised heading, if applicable, and

(7) Mach number whenever speed limitations are expressed in terms of Mach number, if applicable.

SPO.IDE.A.125 Operations under IFR - flight and navigational instruments and associated equipment

Aeroplanes operated under IFR shall be equipped with:

(a) a means of measuring and displaying the following:

(1) magnetic heading,

(2) time in hours, minutes and seconds,

(3) pressure altitude,

(4) indicated airspeed,

(5) vertical speed,

(6) turn and slip,

(7) attitude,

(8) stabilised heading,

(9) outside air temperature, and

(10) Mach number, whenever speed limitations are expressed in terms of Mach number;

(b) a means of indicating when the supply of power to the gyroscopic instruments is not adequate.

(c) whenever two pilots are required for the operation, an additional separate means of displaying for the second pilot:

(1) pressure altitude,
(2) indicated airspeed,
(3) vertical speed
(4) turn and slip,
(5) attitude,
(6) stabilised heading, and
(7) Mach number whenever speed limitations are expressed in terms of Mach number, if applicable;

(d) a means of preventing malfunction of the airspeed indicating system required in (a)(4) and (c)(2) due to condensation or icing; and

(e) for complex motor-powered aeroplanes:

(1) an alternate source of static pressure;

(2) a chart holder in an easily readable position that can be illuminated for night operations;

(3) a second independent means of measuring and displaying altitude unless already installed to comply with (e)(1); and

(4) an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating an attitude indicating system for a minimum period of 30 minutes. The emergency power supply shall be automatically operative after the total failure of the main electrical generating system and clear indication shall be given on the instrument that the attitude indicator is being operated by emergency power.

SPO.IDE.A.126 Additional equipment for single-pilot operation under IFR

Complex motor-powered aeroplanes operated under IFR with a single pilot shall be equipped with an autopilot with at least altitude hold and heading mode.

SPO.IDE.A.130 Terrain awareness warning system (TAWS)

(a) Turbine-powered aeroplanes with a maximum certified take-off mass (MCTOM) of more than 5700 kg shall be equipped with a TAWS that meets the requirements for:

(1) class A equipment, as specified in an acceptable standard, in the case of aeroplanes for which the individual certificate of airworthiness (C of A) was first issued after 1 January 2011; or

(2) class B equipment, as specified in an acceptable standard, in the case of aeroplanes for which the individual (C of A) was first issued on or before 1 January 2011.

(b) When used in commercial operations, turbine-powered aeroplanes for which the individual (C of A) was first issued after 1 January 2019 and having an MCTOM of 5700 kg

or less and an MOPSC of six to nine shall be equipped with a TAWS that meets the requirements for class B equipment, as specified in an acceptable standard.

SPO.IDE.A.131 Airborne collision avoidance system (ACAS)

Unless otherwise provided for by ICAO Doc 9863, turbine-powered aeroplanes with an MCTOM of more than 5700 kg shall be equipped with ACAS II.

SPO.IDE.A.132 Airborne weather detecting equipment - complex motor-powered aeroplanes

The following aeroplanes shall be equipped with airborne weather detecting equipment when operated at night or in IMC in areas where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather detecting equipment, may be expected to exist along the route:

(a) pressurised aeroplanes;

(b) non-pressurised aeroplanes with an MCTOM of more than 5700 kg.

SPO.IDE.A.133 Additional equipment for operations in icing conditions at night - complex motor-powered aeroplanes

(a) Aeroplanes operated in expected or actual icing conditions at night shall be equipped with a means to illuminate or detect the formation of ice.

(b) The means to illuminate the formation of ice shall not cause glare or reflection that would handicap flight crew members in the performance of their duties.

SPO.IDE.A.135 Flight crew interphone system

Aeroplanes operated by more than one flight crew member shall be equipped with a flight crew interphone system, including headsets and microphones for use by all flight crew members.

SPO.IDE.A.140 Cockpit voice recorder

(a) The following aeroplanes shall be equipped with a CVR:

(1) aeroplanes with an MCTOM of more than 27000 kg and first issued with an individual CofA on or after 1 January 2016; and

(2) aeroplanes with an MCTOM of more than 2250 kg:

(i) certified for operation with a minimum crew of at least two pilots;

(ii) equipped with turbojet engine(s) or more than one turboprop engine; and

(iii) for which a type certificate is first issued on or after 1 January 2016.

(b) The CVR shall be capable of retaining data recorded during at least :

(1) the preceding 25 hours for aeroplanes with an MCTOM of more than 27 000 kg and first issued with an individual CofA on or after 1 January 2022; or

(2) the preceding 2 hours in all other cases.

(c) The CVR shall record with reference to a timescale:

(1) voice communications transmitted from or received in the flight crew compartment by radio;

(2) flight crew members' voice communications using the interphone system and the public address system, if installed;

(3) the aural environment of the flight crew compartment, including, without interruption, the audio signals received from each boom and mask microphone in use; and

(4) voice or audio signals identifying navigation or approach aids introduced into a headset or speaker.

(d) The CVR shall start automatically to record prior to the aeroplane moving under its own power and shall continue to record until the termination of the flight when the aeroplane is no longer capable of moving under its own power.

(e) In addition to (d), depending on the availability of electrical power, the CVR shall start to record as early as possible during the cockpit checks prior to engine start at the beginning of the flight until the cockpit checks immediately following engine shutdown at the end of the flight.

(f) If the CVR is not deployable, it shall have a device to assist in locating it under water. By 1 January 2018 at the latest, this device shall have a minimum underwater transmission time of 90 days. If the CVR is deployable, it shall have an automatic emergency locator transmitter.

SPO.IDE.A.145 Flight data recorder

(a) Aeroplanes with an MCTOM of more than 5700 kg and first issued with an individual CofA on or after 1 January 2016 shall be equipped with an FDR that uses a digital method of recording and storing data and for which a method of readily retrieving that data from the storage medium is available.

(b) The FDR shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power, configuration and operation and be capable of retaining data recorded during at least the preceding 25 hours.

(c) Data shall be obtained from aeroplane sources that enable accurate correlation with information displayed to the flight crew.

(d) The FDR shall start automatically to record the data prior to the aeroplane being capable of moving under its own power and shall stop automatically after the aeroplane is incapable of moving under its own power.

(e) The FDR shall have a device to assist in locating it in water.

SPO.IDE.A.146 Lightweight flight recorder

(a) Turbine-engined aeroplanes with an MCTOM of 2 250 kg or more and aeroplanes with an MOPSC of more than 9 shall be equipped with a flight recorder if all the following conditions are met:

(1) they are not within the scope of point SPO.IDE.A.145(a);

(2) they are used for commercial operations;

(3) they are first issued with an individual CofA on or after 5 September 2022.

(b) The flight recorder shall record, by means of flight data or images, information that is sufficient to determine the flight path and aircraft speed.

(c) The flight recorder shall be capable of retaining the flight data and the images recorded during at least the preceding 5 hours.

(d) The flight recorder shall automatically start to record prior to the aeroplane being capable of moving under its own power and shall stop automatically after the aeroplane is no longer capable of moving under its own power.

(e) If the flight recorder records images or audio of the flight crew compartment, then a function shall be provided which can be operated by the pilot-in-command and which modifies image and audio recordings made before the operation of that function, so that those recordings cannot be retrieved using normal replay or copying techniques.

SPO.IDE.A.150 Data link recording

(a) Aeroplanes first issued with an individual (CofA) on or after 1 January 2016 that have the capability to operate data link communications and are required to be equipped with a CVR shall record on a recorder, where applicable:

(1) data link communication messages related to ATS communications to and from the aeroplane, including messages applying to the following applications:

(i) data link initiation;

(ii) controller–pilot communication;

(iii) addressed surveillance;

(iv) flight information;

(v) as far as is practicable, given the architecture of the system, aircraft broadcast surveillance;

(vi) as far as is practicable, given the architecture of the system, aircraft operational control data; and

(vii) as far as is practicable, given the architecture of the system, graphics;

(2) information that enables correlation to any associated records related to data link communications and stored separately from the aeroplane; and

(3) information on the time and priority of data link communications messages, taking into account the system's architecture.

(b) The recorder shall use a digital method of recording and storing data and information and a method for readily retrieving that data. The recording method shall allow the data to match the data recorded on the ground.

(c) The recorder shall be capable of retaining data recorded for at least the same duration as set out for CVRs in SPO.IDE.A.140.

(d) If the recorder is not deployable, it shall have a device to assist in locating it under water. By 1 January 2020 at the latest, this device shall have a minimum underwater transmission time of 90 days. If the recorder is deployable, it shall have an automatic emergency locator transmitter.

(e) The requirements applicable to the start and stop logic of the recorder are the same as the requirements applicable to the start and stop logic of the CVR contained in SPO.IDE.A.140 (d) and (e).

SPO.IDE.A.155 Flight data and cockpit voice combination recorder

Compliance with CVR requirements and FDR requirements may be achieved by:

(a) one flight data and cockpit voice combination recorder if the aeroplane has to be equipped with a CVR or an FDR; or

(b) two flight data and cockpit voice combination recorders if the aeroplane has to be equipped with a CVR and an FDR.

SPO.IDE.A.160 Seats, seat safety belts and restraint systems

Aeroplanes shall be equipped with:

(a) a seat or station for each crew member or task specialist on board,;

(b) a seat belt on each seat, and restraint devices for each station;

(c) for other-than-complex motor-powered aeroplanes, a seat belt with upper torso restraint system on each flight crew seat, having a single point release for aeroplanes having a CofA first issued on or after 25 August 2016;

(d) for complex motor-powered aeroplanes, a seat belt with upper torso restraint system, having a single point release and incorporating a device that will automatically restrain the occupant's torso in the event of rapid deceleration:

(1) on each flight crew seat and on any seat alongside a pilot's seat; and

(2) on each observer's seat located in the flight crew compartment.

(e) The seat belt with upper torso restraint system required by (d) shall have:

(1) a single point release;

(2) on flight crew seats and on any seat alongside a pilot's seat:

(i) two shoulder straps and a seat belt that may be used independently; or

(ii) a diagonal shoulder strap and a seat belt that may be used independently for the following aeroplanes:

(A) aeroplanes with an MCTOM of less than 5700 kg and with an MOPSC of less than nine that are compliant with the emergency landing dynamic conditions defined in the applicable certification specification;

(B) aeroplanes with an MCTOM of less than 5700 kg and with an MOPSC of less than nine that are not compliant with the emergency landing dynamic conditions defined in the applicable certification specification and having an individual (CofA) first issued before 25 August 2016.

SPO.IDE.A.165 First-aid kit

(a) Aeroplanes shall be equipped with a first-aid kit.

(b) The first-aid kit shall be:

(1) readily accessible for use; and

(2) kept up-to-date.

SPO.IDE.A.170 Supplemental oxygen - pressurised aeroplanes

(a) Pressurised aeroplanes operated at flight altitudes for which the oxygen supply is required in accordance with (b) shall be equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the required oxygen supplies.

(b) Pressurised aeroplanes operated above flight altitudes at which the pressure altitude in the cabin compartments is above 10000 ft shall carry enough breathing oxygen to supply all crew members and task specialists at least:

(1) for any period when the cabin pressure altitude exceeds 15000 ft, but in no case less than 10 minutes' supply;

(2) for any period when, in the event of loss of pressurisation and taking into account the circumstances of the flight, the pressure altitude in the flight crew and cabin compartment will be between 14000 ft and 15000 ft;

(3) for any period in excess of 30 minutes when the pressure altitude in the flight crew and cabin compartment will be between 10000 ft and 14000 ft; and

(4) for no less than 10 minutes, in the case of aeroplanes operated at pressure altitudes above 25000 ft, or operated below that altitude, but under conditions that will not allow them to descend safely to a pressure altitude of 13000 ft within 4 minutes.

(c) Pressurised aeroplanes operated at flight altitudes above 25000 ft shall, in addition, be equipped with:

(1) a device to provide a warning indication to the flight crew of any loss of pressurisation; and

(2) in the case of complex motor-powered aeroplanes, quick donning masks for flight crew members.

SPO.IDE.A.175 Supplemental oxygen - non-pressurised aeroplanes

(a) Non-pressurised aeroplanes operated at flight altitudes when the oxygen supply is required in accordance with (b) shall be equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the required oxygen supplies.

(b) Non-pressurised aeroplanes operated above flight altitudes at which the pressure altitude in the cabin compartments is above 10000 ft shall carry enough breathing oxygen to supply:

(1) all crew members for any period in excess of 30 minutes when the pressure altitude in the cabin compartment will be between 10000 ft and 13000 ft; and

(2) all persons on board for any period that the pressure altitude in the cabin compartment will be above 13000 ft.

(c) Notwithstanding (b), excursions of a specified duration between 13000 ft and 16000 ft may be undertaken without oxygen supplies, in accordance with SPO.OP.195(b).

SPO.IDE.A.180 Hand fire extinguishers

(a) Aeroplanes, except touring motor gliders (TMG), shall be equipped with at least one hand fire extinguisher:

(1) in the flight crew compartment; and

(2) in each cabin compartment that is separate from the flight crew compartment, except if the compartment is readily accessible to the flight crew.

(b) The type and quantity of extinguishing agent for the required fire extinguishers shall be suitable for the type of fire likely to occur in the compartment where the extinguisher is intended to be used and to minimise the hazard of toxic gas concentration in compartments occupied by persons.

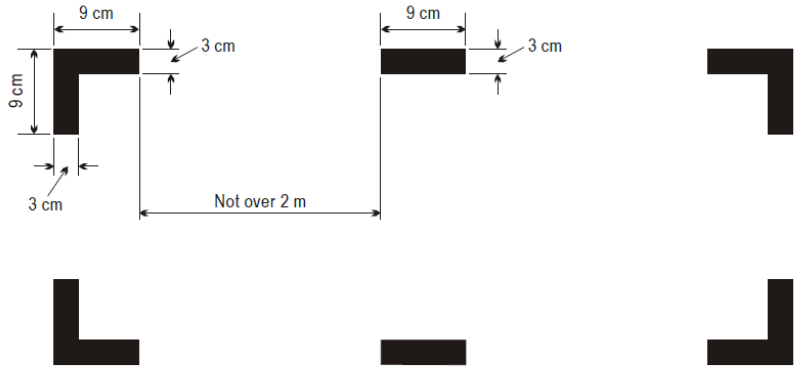
SPO.IDE.A.181 Crash axe and crowbar

Aeroplanes with an MCTOM of more than 5700 kg shall be equipped with at least one crash axe or crowbar located in the flight crew compartment.

SPO.IDE.A.185 Marking of break-in points

If areas of the aeroplane's fuselage suitable for break-in by rescue crews in an emergency are marked, such areas shall be marked as shown in Figure 1.

Figure 1: Marking of break-in points



SPO.IDE.A.190 Emergency locator transmitter (ELT)

(a) Aeroplanes shall be equipped with:

(1) an ELT of any type, when first issued with an individual (CofA) on or before 1 July 2008;

(2) an automatic ELT, when first issued with an individual (CofA) after 1 July 2008; or

(3) a survival ELT (ELT(S)) or a personal locator beacon (PLB), carried by a crew member or a task specialist, when certified for a maximum seating configuration of six or less.

(b) ELTs of any type and PLBs shall be capable of transmitting simultaneously on 121.5 MHz and 406 MHz.

SPO.IDE.A.195 Flight over water

(a) The following aeroplanes shall be equipped with a life-jacket for each person on board, that shall be worn or stowed in a position that is readily accessible from the seat or station of the person for whose use it is provided:

(1) single-engine landplanes when:

(i) flying over water beyond gliding distance from land; or

(ii) taking off or landing at an aerodrome or operating site where, in the opinion of the pilot-in-command, the take-off or approach path is so disposed over water that there would be a likelihood of a ditching;

(2) seaplanes operated over water; and

(3) aeroplanes operated at a distance away from land where an emergency landing is possible greater than that corresponding to 30 minutes at normal cruising speed or 50 NM, whichever is less.

(b) Each life-jacket shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons.

(c) Seaplanes operated over water shall be equipped with:

(1) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the aeroplane on water, appropriate to its size, weight and handling characteristics; and

(2) equipment for making the sound signals as prescribed in the International Regulations for Preventing Collisions at Sea, where applicable.

(d) The pilot-in-command of an aeroplane operated at a distance away from land where an emergency landing is possible greater than that corresponding to 30 minutes at normal cruising speed or 50 NM, whichever is the lesser, shall determine the risks to survival of the occupants of the aeroplane in the event of a ditching, based on which he/she shall determine the carriage of:

(1) equipment for making the distress signals;

(2) life-rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency; and

(3) life-saving equipment, to provide the means of sustaining life, as appropriate to the flight to be undertaken.

SPO.IDE.A.200 Survival equipment

(a) Aeroplanes operated over areas in which search and rescue would be especially difficult shall be equipped with:

(1) signalling equipment to make the distress signals;

(2) at least one survival ELT (ELT(S)); and

(3) additional survival equipment for the route to be flown taking account of the number of persons on board.

(b) The additional survival equipment specified in (a)(3) does not need to be carried when the aeroplane:

(1) remains within a distance from an area where search and rescue is not especially difficult corresponding to:

(i) 120 minutes at one-engine-inoperative (OEI) cruising speed for aeroplanes capable of continuing the flight to an aerodrome with the critical engine(s) becoming inoperative at any point along the route or planned diversion routes; or

(ii) 30 minutes at cruising speed for all other aeroplanes; or

(2) remains within a distance no greater than that corresponding to 90 minutes at cruising speed from an area suitable for making an emergency landing, for aeroplanes certified in accordance with the applicable airworthiness standard.

SPO.IDE.A.205 Individual protective equipment

Each person on board shall wear individual protective equipment that is adequate for the type of operation being undertaken.

SPO.IDE.A.210 Headset

(a) Aeroplanes shall be equipped with a headset with a boom microphone or equivalent for each flight crew member at their assigned station in the flight crew compartment.

(b) Aeroplanes operated under IFR or at night shall be equipped with a transmit button on the manual pitch and roll control for each required flight crew member.

SPO.IDE.A.215 Radio communication equipment

(a) Aeroplanes operated under IFR or at night, or when required by the applicable airspace requirements, shall be equipped with radio communication equipment that, under normal radio propagating conditions, shall be capable of:

(1) conducting two-way communication for aerodrome control purposes;

(2) receiving meteorological information at any time during flight;

(3) conducting two-way communication at any time during flight with those aeronautical stations and on those frequencies prescribed by the appropriate authority; and

(4) providing for communication on the aeronautical emergency frequency 121.5 MHz.

(b) When more than one communication equipment unit is required, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.

SPO.IDE.A.220 Navigation equipment

(a) Aeroplanes shall be equipped with navigation equipment that will enable them to proceed in accordance with:

(1) the ATS flight plan, if applicable; and

(2) the applicable airspace requirements.

(b) Aeroplanes shall have sufficient navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment shall

allow safe navigation in accordance with (a), or an appropriate contingency action to be completed safely.

(c) Aeroplanes operated on flights in which it is intended to land in IMC shall be equipped with suitable equipment capable of providing guidance to a point from which a visual landing can be performed. This equipment shall be capable of providing such guidance for each aerodrome at which it is intended to land in IMC and for any designated alternate aerodromes.

(d) For PBN operations the aircraft shall meet the airworthiness certification requirements for the appropriate navigation specification.

(e) Aeroplanes shall be equipped with surveillance equipment in accordance with the applicable airspace requirements.

SPO.IDE.A.225 Transponder

Where required by the airspace being flown, aeroplanes shall be equipped with a secondary surveillance radar (SSR) transponder with all the required capabilities.

SPO.IDE.A.230 Management of aeronautical databases

(a) The operator shall only use electronic navigation data products that support a navigation application meeting standards of integrity that are adequate for the intended use of the data.

(b) When the electronic navigation data products support a navigation application needed for an operation for which Part-SPA requires an approval, the operator shall demonstrate to the Kuwait DGCA that the process applied and the delivered products meet standards of integrity that are adequate for the intended use of the data.

(c) The operator shall continuously monitor both the process and the products, either directly or by monitoring the compliance of third party providers.

(d) The operator shall ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aeroplanes that require it.

Section 2 - Helicopters

SPO.IDE.H.100 Instruments and equipment - general

(a) Instruments and equipment required by this Subpart shall be approved in accordance with the applicable airworthiness requirements if they are:

(1) used by the flight crew to control the flight path,

(2) to comply with SPO.IDE.H.215;

(3) and SPO.IDE.H.220; or

(4) installed in the helicopter.

(b) The following items, when required by this Subpart, do not need an equipment approval:

(1) independent portable light,

(2) an accurate time piece,

(3) chart holder,

(4) first-aid kit,

(5) survival and signalling equipment, and

(6) sea anchor and equipment for mooring.

(7) a simple PCDS used by a task specialist as a restraint device.

(c) Instruments and equipment not required by this Subpart as well as any other equipment that is not required by other applicable Parts, but is carried on a flight, shall comply with the following:

(1) the information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply with Annex I to the KCASR Basic Regulation or SPO.IDE.H.215 and SPO.IDE.H.220; and

(2) the instruments and equipment shall not affect the airworthiness of the helicopter, even in the case of failures or malfunction.

(d) Instruments and equipment shall be readily operable or accessible from the station where the flight crew member that needs to use it is seated.

(e) Those instruments that are used by a flight crew member shall be so arranged as to permit the flight crew member to see the indications readily from his/her station, with the minimum practicable deviation from the position and line of vision which he/she normally assumes when looking forward along the flight path.

(f) All required emergency equipment shall be easily accessible for immediate use.

SPO.IDE.H.105 Minimum equipment for flight

A flight shall not be commenced when any of the helicopter's instruments, items of equipment or functions required for the intended flight are inoperative or missing, unless:

(a) the helicopter is operated in accordance with the minimum equipment list (MEL), if established;

(b) for complex motor-powered helicopters, and for any helicopter used in commercial operations, the operator is approved by the Kuwait DGCA to operate the helicopter within the constraints of the master minimum equipment list (MMEL) in accordance with point ORO.MLR.105(j) of this part; or

(c) the helicopter is subject to a permit to fly issued in accordance with the applicable airworthiness requirements.

SPO.IDE.H.115 Operating lights

Helicopters operated at night shall be equipped with:

(a) an anti-collision light system;

(b) navigation/position lights;

(c) a landing light;

(d) lighting supplied from the helicopter's electrical system to provide adequate illumination for all instruments and equipment essential to the safe operation of the helicopter;

(e) lighting supplied from the helicopter's electrical system to provide illumination in all cabin compartments;

(f) an independent portable light for each crew member station; and

(g) lights to conform with the International Regulations for Preventing Collisions at Sea if the helicopter is amphibious.

SPO.IDE.H.120 Operations under VFR - flight and navigational instruments and associated equipment

(a) Helicopters operated under VFR by day shall be equipped with a means of measuring and displaying the following:

(1) magnetic heading,

(2) time in hours, minutes and seconds,

(3) pressure altitude,

(4) indicated airspeed, and

(5) slip.

(b) Helicopters operated under VMC overwater and out of sight of the land, under VMC at night, or when the visibility is less than 1 500 m, or in conditions where the helicopter cannot be maintained in a desired flight path without reference to one or more additional instruments, shall be, in addition to (a), equipped with:

(1) a means of measuring and displaying:

(i) attitude,

(ii) vertical speed, and

(iii) stabilised heading;

(2) a means of indicating when the supply of power to the gyroscopic instruments is not adequate; and

(3) for complex motor-powered helicopters, a means of preventing malfunction of the airspeed indicating system required in (a)(4) due to condensation or icing.

(c) Other-than-complex motor-powered helicopters operated when the visibility is less than 1500 m, or in conditions where they cannot be maintained in a desired flight path without reference to one or more additional instruments, shall be, in addition to (a) and (b), equipped with a means of preventing malfunction of the airspeed indicating system required in (a)(4) due to condensation or icing.

(d) Whenever two pilots are required for the operation, helicopters shall be equipped with an additional separate means of displaying:

(1) pressure altitude,

(2) indicated airspeed,

(3) slip,

(4) attitude, if applicable,

(5) vertical speed, if applicable, and

(6) stabilised heading, if applicable.

SPO.IDE.H.125 Operations under IFR - flight and navigational instruments and associated equipment

Helicopters operated under IFR shall be equipped with:

(a) a means of measuring and displaying:

(1) magnetic heading,

(2) time in hours, minutes and seconds,

(3) pressure altitude,

(4) indicated airspeed,

(5) vertical speed,

(6) slip,

(7) attitude,

(8) stabilised heading, and

(9) outside air temperature;

(b) a means of indicating when the supply of power to the gyroscopic instruments is not adequate;

(c) whenever two pilots are required for the operation, an additional separate means of displaying:

(1) pressure altitude,

(2) indicated airspeed,

(3) vertical speed,

(4) slip,

(5) attitude, and

(6) stabilised heading;

(d) a means of preventing malfunction of the airspeed indicating system required by (a)(4) and (c)(2) due to condensation or icing;

(e) an additional means of measuring and displaying attitude as a standby instrument; and

(f) the following for complex motor-powered helicopters:

(1) an alternate source of static pressure; and

(2) a chart holder in an easily readable position that can be illuminated for night operations.

SPO.IDE.H.126 Additional equipment for single-pilot operation under IFR

Helicopters operated under IFR with a single pilot shall be equipped with an autopilot with at least altitude hold and heading mode.

SPO.IDE.H.132 Airborne weather detecting equipment - complex motor-powered helicopters

Helicopters operated under IFR or at night shall be equipped with airborne weather detecting equipment when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather detecting equipment, may be expected to exist along the route to be flown.

SPO.IDE.H.133 Additional equipment for operations in icing conditions at night - complex motor-powered helicopters

(a) Helicopters operated in expected or actual icing conditions at night shall be equipped with a means to illuminate or detect the formation of ice.

(b) The means to illuminate the formation of ice shall not cause glare or reflection that would handicap flight crew members in the performance of their duties.

SPO.IDE.H.135 Flight crew interphone system

Helicopters operated by more than one flight crew member shall be equipped with a flight crew interphone system, including headsets and microphones for use by all flight crew members.

SPO.IDE.H.140 Cockpit voice recorder

(a) Helicopters with an MCTOM of more than 7000 kg and first issued with an individual CofA on or after 1 January 2016 shall be equipped with a CVR.

(b) The CVR shall be capable of retaining data recorded during at least the preceding 2 hours.

(c) The CVR shall record with reference to a timescale:

(1) voice communications transmitted from or received in the flight crew compartment by radio;

(2) flight crew members' voice communications using the interphone system and the public address system, if installed;

(3) the aural environment of the cockpit, including, without interruption, the audio signals received from each crew microphone; and

(4) voice or audio signals identifying navigation or approach aids introduced into a headset or speaker.

(d) The CVR shall start automatically to record prior to the helicopter moving under its own power and shall continue to record until the termination of the flight when the helicopter is no longer capable of moving under its own power.

(e) In addition to (d), depending on the availability of electrical power, the CVR shall start to record as early as possible during the cockpit checks prior to engine start at the beginning of the flight until the cockpit checks immediately following engine shutdown at the end of the flight.

(f) If the CVR is not deployable, it shall have a device to assist in locating it under water. By 1 January 2020 at the latest, this device shall have a minimum underwater transmission

time of 90 days. If the CVR is deployable, it shall have an automatic emergency locator transmitter.

SPO.IDE.H.145 Flight data recorder

(a) Helicopters with an MCTOM of more than 3175 kg and first issued with an individual CofA on or after 1 January 2016 shall be equipped with an FDR that uses a digital method of recording and storing data and for which a method of readily retrieving that data from the storage medium is available.

(b) The FDR shall record the parameters required to determine accurately the helicopter flight path, speed, attitude, engine power, configuration and operation and be capable of retaining data recorded during at least the preceding 10 hours.

(c) Data shall be obtained from helicopter sources that enable accurate correlation with information displayed to the flight crew.

(d) The FDR shall start automatically to record the data prior to the helicopter being capable of moving under its own power and shall stop automatically after the helicopter is incapable of moving under its own power.

(e) If the FDR is not deployable, it shall have a device to assist in locating it under water. By 1 January 2020 at the latest, this device shall have a minimum underwater transmission time of 90 days. If the FDR is deployable, it shall have an automatic emergency locator transmitter.

SPO.IDE.H.146 Lightweight flight recorder

(a) Turbine-engined helicopters with an MCTOM of 2 250 kg or more shall be equipped with a flight recorder if all the following conditions are met:

(1) they are within the scope of point SPO.IDE.H.145(a);

(2) they are used for commercial operations;

(3) they are first issued with an individual CofA on or after 5 September 2022.

(b) The flight recorder shall record, by means of flight data or images, information that is sufficient to determine the flight path and aircraft speed.

(c) The flight recorder shall be capable of retaining the flight data and the images recorded during at least the preceding 5 hours.

(d) The flight recorder shall automatically start to record prior to the helicopter being capable of moving under its own power and shall stop automatically after the helicopter is no longer capable of moving under its own power.

(e) If the flight recorder records images or audio of the flight crew compartment, then a function shall be provided which can be operated by the pilot-in-command and which modifies image and audio recordings made before the operation of that function, so that those recordings cannot be retrieved using normal replay or copying techniques.

SPO.IDE.H.150 Data link recording

(a) Helicopters first issued with an individual CofA on or after 1 January 2016 that have the capability to operate data link communications and are required to be equipped with a CVR shall record on a recorder, where applicable:

(1) data link communication messages related to ATS communications to and from the helicopter, including messages applying to the following applications:

(i) data link initiation;

(ii) controller–pilot communication;

(iii) addressed surveillance;

(iv) flight information;

(v) as far as is practicable, given the architecture of the system, aircraft broadcast surveillance;

(vi) as far as is practicable, given the architecture of the system, aircraft operational control data; and

(vii) as far as is practicable, given the architecture of the system, graphics;

(2) information that enables correlation to any associated records related to data link communications and stored separately from the helicopter; and

(3) information on the time and priority of data link communications messages, taking into account the system's architecture.

(b) The recorder shall use a digital method of recording and storing data and information and a method for readily retrieving that data. The recording method shall allow the data to match the data recorded on the ground.

(c) The recorder shall be capable of retaining data recorded for at least the same duration as set out for CVRs in SPO.IDE.H.140.

(d) The recorder shall have a device to assist in locating it in water.

(e) The requirements applicable to the start and stop logic of the recorder are the same as the requirements applicable to the start and stop logic of the CVR contained in SPO.IDE.H.140 (d) and (e).

SPO.IDE.H.155 Flight data and cockpit voice combination recorder

Compliance with CVR and FDR requirements may be achieved by one flight data and cockpit voice combination recorder.

SPO.IDE.H.160 Seats, seat safety belts and restraint systems

(a) Helicopters shall be equipped with:

(1) a seat or station for each crew member or task specialist on board;

(2) a seat belt on each seat, and restraint devices for each station;

(3) for helicopters first issued with an individual (CofA) after 31 December 2012, a seat belt with an upper torso restraint system for each seat; and

(4) a seat belt with upper torso restraint system incorporating a device that will automatically restrain the occupant's torso in the event of rapid deceleration on each flight crew seat.

(b) A seat belt with upper torso restraint system shall have a single point release.

SPO.IDE.H.165 First-aid kit

(a) Helicopters shall be equipped with a first-aid kit.

(b) The first-aid kit shall be:

(1) readily accessible for use; and

(2) kept up-to-date.

SPO.IDE.H.175 Supplemental oxygen - non-pressurised helicopters

(a) Non-pressurised helicopters operated at flight altitudes when the oxygen supply is required in accordance with (b) shall be equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the required oxygen supplies.

(b) Non-pressurised helicopters operated above flight altitudes at which the pressure altitude in the cabin compartments is above 10000 ft shall carry enough breathing oxygen to supply:

(1) all crew members for any period in excess of 30 minutes when the pressure altitude in the cabin compartment will be between 10000 ft and 13000 ft; and

(2) all crew members and task specialists for any period that the pressure altitude in the cabin compartment will be above 13000 ft.

(c) Notwithstanding (b), excursions of a specified duration between 13000 ft and 16000 ft may be undertaken without oxygen supplies, -in accordance with SPO.OP.195(b).

SPO.IDE.H.180 Hand fire extinguishers

(a) Helicopters shall be equipped with at least one hand fire extinguisher:

(1) in the flight crew compartment; and

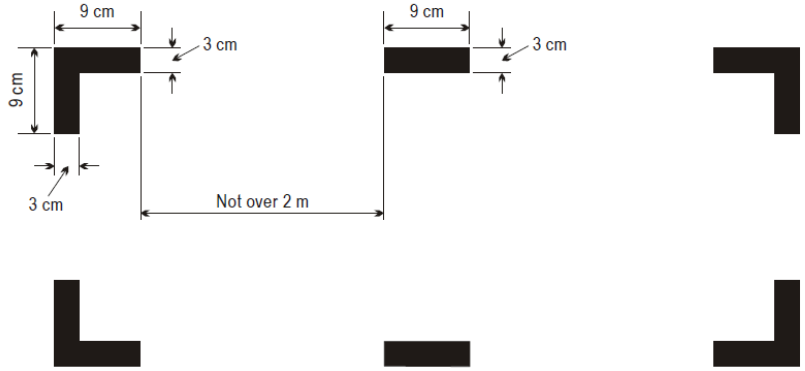
(2) in each cabin compartment that is separate from the flight crew compartment, except if the compartment is readily accessible to the flight crew.

(b) The type and quantity of extinguishing agent for the required fire extinguishers shall be suitable for the type of fire likely to occur in the compartment where the extinguisher is intended to be used and to minimise the hazard of toxic gas concentration in compartments occupied by persons.

SPO.IDE.H.185 Marking of break-in points

If areas of the helicopter's fuselage suitable for break-in by rescue crews in an emergency are marked, such areas shall be marked as shown in Figure 1.

Figure 1: Marking of break-in points



SPO.IDE.H.190 Emergency locator transmitter (ELT)

(a) Helicopters certified for a maximum seating configuration above six shall be equipped with:

(1) an automatic ELT; and

(2) one survival ELT (ELT(S)) in a life-raft or life-jacket when the helicopter is operated at a distance from land corresponding to more than 3 minutes flying time at normal cruising speed.

(b) Helicopters certified for a maximum seating configuration of six or less shall be equipped with an ELT(S) or a personal locator beacon (PLB), carried by a crew member or a task specialist.

(c) ELTs of any type and PLBs shall be capable of transmitting simultaneously on 121.5 MHz and 406 MHz.

SPO.IDE.H.195 Flight over water - other-than-complex motor-powered helicopters

(a) Helicopters shall be equipped with a life-jacket for each person on board, that shall be worn or stowed in a position that is readily accessible from the seat or station of the person for whose use it is provided, when:

(1) flying over water beyond auto rotational distance from the land where in case of the critical engine failure, the helicopter is not able to sustain level flight; or

(2) flying over water at a distance of land corresponding to more than 10 minutes flying at normal cruising speed, where in case of the critical engine failure, the helicopter is able to sustain level flight; or

(3) taking off or landing at an aerodrome/operating site where the take-off or approach path is over water.

(b) Each life-jacket shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons.

(c) The pilot-in-command of a helicopter operated on a flight over water at a distance from land corresponding to more than 30 minutes flying time at normal cruising speed or 50 NM, whichever is less, shall determine the risks to survival of the occupants of the helicopter in the event of a ditching, based on which he/she shall determine the carriage of:

(1) equipment for making the distress signals;

(2) life-rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency; and

(3) life-saving equipment to provide the means of sustaining life, as appropriate to the flight to be undertaken.

(d) The pilot-in-command shall determine the risks to survival of the occupants of the helicopter in the event of a ditching, when deciding if the life-jackets required in (a) shall be worn by all occupants.

SPO.IDE.H.197 Life-jackets - complex motor-powered helicopters

(a) Helicopters shall be equipped with a life-jacket for each person on board, that shall be worn or stowed in a position that is readily accessible from the seat or station of the person for whose use it is provided, when:

(1) operated on a flight over water at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed, where in the case of the critical engine failure, the helicopter is able to sustain level flight;

(2) operated on a flight over water beyond auto-rotational distance from the land, where in the case of the critical engine failure, the helicopter is not able to sustain level flight; or

(3) taking off or landing at an aerodrome or operating site where the take-off or approach path is so disposed over water that in the event of a mishap there would be the likelihood of a ditching.

(b) Each life-jacket shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons.

SPO.IDE.H.198 Survival suits - complex motor-powered helicopters

Each person on board shall wear a survival suit when so determined by the pilot-in-command based on a risk assessment taking into account the following conditions:

(a) flights over water beyond auto rotational distance or safe forced-landing distance from land, where, in the case of a critical engine failure, the helicopter is not able to sustain level flight; and

(b) the weather report or forecasts available to the pilot-in-command indicate that the sea temperature will be less than plus 10 °C during the flight.

SPO.IDE.H.199 Life-rafts, survival ELTs and survival equipment on extended overwater flights - complex motor-powered helicopters

Helicopters operated:

(a) on a flight over water at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed where in the case of the critical engine failure, the helicopter is able to sustain level flight; or

(b) on a flight over water at a distance corresponding to more than 3 minutes flying time at normal cruising speed, where in the case of the critical engine failure, the helicopter is not able to sustain level flight, and if so determined by the pilot-in-command by means of a risk assessment, shall be equipped with:

(1) at least one life-raft with a rated capacity of not less than the maximum number of persons on board, stowed so as to facilitate their ready use in emergency;

(2) at least one survival ELT (ELT(S)) for each required life-raft; and

(3) life-saving equipment, including means of sustaining life, as appropriate to the flight to be undertaken.

SPO.IDE.H.200 Survival equipment

Helicopters operated over areas in which search and rescue would be especially difficult shall be equipped with:

(a) signalling equipment to make distress signals;

(b) at least one survival ELT (ELT(S)); and

(c) additional survival equipment for the route to be flown taking account of the number of persons on board.

SPO.IDE.H.202 Helicopters certified for operating on water - miscellaneous equipment

Helicopters certified for operating on water shall be equipped with:

(a) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the helicopter on water, appropriate to its size, weight and handling characteristics; and

(b) equipment for making the sound signals prescribed in the International Regulations for Preventing Collisions at Sea, where applicable.

SPO.IDE.H.203 All helicopters on flights over water - ditching

Complex motor-powered helicopters operated on a flight over water in a hostile environment at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed and other-than-complex motor-powered helicopters flying over water in a hostile environment beyond a distance of 50 NM from land shall be:

(a) designed for landing on water in accordance with the relevant airworthiness code;

(b) certified for ditching in accordance with the relevant airworthiness code; or

(c) fitted with emergency flotation equipment.

SPO.IDE.H.205 Individual protective equipment

Each person on board shall wear individual protective equipment that is adequate for the type of operation being undertaken.

SPO.IDE.H.210 Headset

Whenever a radio communication and/or radio navigation system is required, helicopters shall be equipped with a headset with boom microphone or equivalent and a transmit button on the flight controls for each required pilot, crew member and/or task specialist at his/her assigned station.

SPO.IDE.H.215 Radio communication equipment

(a) Helicopters operated under IFR or at night, or when required by the applicable airspace requirements, shall be equipped with radio communication equipment that, under normal radio propagating conditions, shall be capable of:

(1) conducting two-way communication for aerodrome control purposes;

(2) receiving meteorological information;

(3) conducting two-way communication at any time during flight with those aeronautical stations and on those frequencies prescribed by the appropriate authority; and

(4) providing for communication on the aeronautical emergency frequency 121.5 MHz.

(b) When more than one communications equipment unit is required, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.

(c) When a radio communication system is required, and in addition to the flight crew interphone system required in SPO.IDE.H.135, helicopters shall be equipped with a transmit button on the flight controls for each required pilot and crew member at his/her assigned station.

SPO.IDE.H.220 Navigation equipment

(a) Helicopters shall be equipped with navigation equipment that will enable them to proceed in accordance with:

(1) the ATS flight plan, if applicable; and

(2) the applicable airspace requirements.

(b) Helicopters shall have sufficient navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment shall allow safe navigation in accordance with (a), or an appropriate contingency action to be completed safely.

(c) Helicopters operated on flights in which it is intended to land in IMC shall be equipped with navigation equipment capable of providing guidance to a point from which a visual landing can be performed. This equipment shall be capable of providing such guidance for each aerodrome at which it is intended to land in IMC and for any designated alternate aerodromes.

(d) For PBN operations the aircraft shall meet the airworthiness certification requirements for the appropriate navigation specification.

SPO.IDE.H.225 Transponder

Where required by the airspace being flown, helicopters shall be equipped with a secondary surveillance radar (SSR) transponder with all the required capabilities.

SPO.IDE.H.230 Management of aeronautical databases

(a) The operator shall only use electronic navigation data products that support a navigation application meeting standards of integrity that are adequate for the intended use of the data.

(b) When the electronic navigation data products support a navigation application needed for an operation for which Part-SPA requires an approval, the operator shall demonstrate to the Kuwait DGCA that the process applied and the delivered products meet standards of integrity that are adequate for the intended use of the data.

(c) The operator shall continuously monitor both the process and the products, either directly or by monitoring the compliance of third party providers.

(d) The operator shall ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aeroplanes that require it.

Section 3 - Sailplanes

SPO.IDE.S.100 Instruments and equipment - general

(a) Instruments and equipment required by this Subpart shall be approved in accordance with the applicable airworthiness requirements if they are:

(1) used by the flight crew to control the flight path,

(2) used to comply with SPO.IDE.S.145;

(3) used to comply with SPO.IDE.S.150; or

(4) installed in the sailplane.

(b) The following items, when required by this Subpart, do not need an equipment approval:

(1) independent portable light,

(2) accurate time piece, and

(3) survival and signalling equipment.

(c) Instruments and equipment not required by this Subpart as well as any other equipment that is not required by other applicable Parts, but is carried on a flight, shall comply with the following:

(1) the information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply with Annex I to the KCASR Basic Regulation; and

(2) the instruments and equipment shall not affect the airworthiness of the sailplane, even in the case of failures or malfunction.

(d) Instruments and equipment shall be readily operable or accessible from the station where the flight crew member that needs to use it is seated.

(e) All required emergency equipment shall be easily accessible for immediate use.

SPO.IDE.S.105 Minimum equipment for flight

A flight shall not be commenced when any of the sailplane instruments, items of equipment or functions required for the intended flight are inoperative or missing, unless:

(a) the sailplane is operated in accordance with the MEL, if established; or

(b) the sailplane is subject to a permit to fly issued in accordance with the applicable airworthiness requirements.

SPO.IDE.S.115 Operations under VFR - flight and navigational instruments

(a) Sailplanes operated under VFR by day shall be equipped with a means of measuring and displaying the following:

(1) in the case of powered sailplanes, magnetic heading,

(2) time in hours, minutes and seconds,

(3) pressure altitude, and

(4) indicated airspeed.

(b) Sailplanes operating in conditions where the sailplane cannot be maintained in a desired attitude without reference to one or more additional instruments, shall be, in addition to (a), equipped with a means of measuring and displaying:

(1) vertical speed,

(2) attitude or turn and slip, and

(3) magnetic heading.

SPO.IDE.S.120 Cloud flying - flight and navigational instruments

Sailplanes performing cloud flying shall be equipped with a means of measuring and displaying:

(a) magnetic heading,

(b) time in hours, minutes and seconds,

(c) pressure altitude,

(d) indicated airspeed,

(e) vertical speed, and

(f) attitude or turn and slip.

SPO.IDE.S.125 Seats and restraint systems

(a) Sailplanes shall be equipped with:

(1) a seat for each person on board; and

(2) a seat belt with upper torso restraint system for each seat according to the AFM.

(b) A seat belt with upper torso restraint system shall have a single point release.

SPO.IDE.S.130 Supplemental oxygen

Sailplanes operated at pressure altitudes above 10000 ft shall be equipped with an oxygen storage and dispensing apparatus carrying enough breathing oxygen to supply:

(a) crew members for any period in excess of 30 minutes when the pressure altitude will be between 10000 ft and 13000 ft; and

(b) all crew members and task specialists for any period that the pressure altitude will be above 13000 ft.

SPO.IDE.S.135 Flight over water

The pilot-in-command of a sailplane operated over water shall determine the risks to survival of the occupants of the sailplane in the event of a ditching, based on which he/she shall determine the carriage of:

(a) a life-jacket, or equivalent individual floatation device, for each person on board, that shall be worn or stowed in a position that is readily accessible from the seat of the person for whose use it is provided;

(b) an emergency locator transmitter (ELT) or a personal locator beacon (PLB), carried by a crew member or a task specialist, capable of transmitting simultaneously on 121.5 MHz and 406 MHz; and

(c) equipment for making distress signals, when operating a flight:

(1) over water beyond gliding distance from land; or

(2) where the take-off or approach path is so disposed over water that in the event of a mishap there would be a likelihood of ditching.

SPO.IDE.S.140 Survival equipment

Sailplanes operated over areas in which search and rescue would be especially difficult shall be equipped with such signalling devices and life-saving equipment as appropriate to the area overflown.

SPO.IDE.S.145 Radio communication equipment

(a) Where required by the airspace being flown sailplanes shall be equipped with radio communication equipment capable of conducting two-way communication with those aeronautical stations or those frequencies to meet airspace requirements

(b) Radio communication equipment, if required by (a), shall provide for communication on the aeronautical emergency frequency 121.5 MHz.

SPO.IDE.S.150 Navigation equipment

Sailplanes shall be equipped with any navigation equipment necessary to proceed in accordance with:

(a) the ATS flight plan if applicable; and

(b) the applicable airspace requirements.

SPO.IDE.S.155 Transponder

When required by the airspace being flown, sailplanes shall be equipped with a secondary surveillance radar (SSR) transponder with all the required capabilities.

Subpart E - Specific requirements

Section 1 - Helicopter external sling load operations (HESLO)

SPO.SPEC.HESLO.100 Standard operating procedures

The standard operating procedures for HESLO shall specify:

(a) the equipment to be carried, including its operating limitations and appropriate entries in the MEL, as applicable;

(b) crew composition and experience requirements of crew members and task specialists;

(c) the relevant training for crew members and task specialists to perform their task and the qualification and nomination of persons providing such training to the crew members and task specialists;

(d) responsibilities and duties of crew members and task specialists;

(e) performance criteria necessary to be met to conduct HESLO operations;

(f) normal, abnormal and emergency procedures.

SPO.SPEC.HESLO.105 Specific HESLO equipment

The helicopter shall be equipped with at least:

(a) one cargo safety mirror or alternative means to see the hook(s)/load; and

(b) one load meter, unless there is another method of determining the weight of the load.

SPO.SPEC.HESLO.110 Transportation of dangerous goods

The operator transporting dangerous goods to or from unmanned sites or remote locations shall apply to the competent authority for an exemption from the provisions of the Technical Instructions if they intend not to comply with the requirements of those Instructions.

Section 2 - Human external cargo operations (HEC)

SPO.SPEC.HEC.100 Standard operating procedures

The standard operating procedures for HEC shall specify:

(a) the equipment to be carried, including its operating limitations and appropriate entries in the MEL, as applicable;

(b) crew composition and experience requirements of crew members and task specialists;

(c) the relevant training for crew members and task specialists to perform their task and the qualification and nomination of persons providing such training to the crew members and task specialists;

(d) responsibilities and duties of crew members and task specialists;

(e) performance criteria necessary to be met to conduct HEC operations;

(f) normal, abnormal and emergency procedures.

SPO.SPEC.HEC.105 Specific HEC equipment

(a) The helicopter shall be equipped with:

(1) hoist operations equipment or cargo hook;

(2) one cargo safety mirror or alternative means to see the hook; and

(3) one load meter, unless there is another method of determining the weight of the load.

(b) The installation of all hoist and cargo hook equipment and any subsequent modifications shall have an airworthiness approval appropriate to the intended function.

Section 3 - Parachute operations (PAR)

SPO.SPEC.PAR.100 Standard operating procedures

The standard operating procedures for HEC shall specify:

(a) the equipment to be carried, including its operating limitations and appropriate entries in the MEL, as applicable;

(b) crew composition and experience requirements of crew members and task specialists;

(c) the relevant training for crew members and task specialists to perform their task and the qualification and nomination of persons providing such training to the crew members and task specialists;

(d) responsibilities and duties of crew members and task specialists;

(e) performance criteria necessary to be met to conduct HEC operations;

(f) normal, abnormal and emergency procedures.

SPO.SPEC.PAR.105 Carriage of crew members and task specialists

The requirement laid down in SPO.GEN.106(c) is not applicable for task specialists performing parachute jumping.

SPO.SPEC.PAR.110 Seats

Notwithstanding SPO.IDE.A.160(a) and SPO.IDE.H.160(a)(1), the floor may be used as a seat, provided means are available for the task specialist to hold or strap on.

SPO.SPEC.PAR.115 Supplemental oxygen

Notwithstanding SPO.OP.195(a), the requirement to use supplemental oxygen is not applicable for task specialists carrying out duties essential to the specialised task whenever the cabin altitude:

(a) exceeds 13000 ft, for a period of not more than 6 minutes.

(b) exceeds 15000 ft, for a period of not more 3 minutes.

SPO.SPEC.PAR.125 Releasing of dangerous goods

Notwithstanding SPO.GEN.155, parachutists may exit the aircraft for the purpose of approved parachute display over congested areas of cities. Towns or settlements or over an open-air assembly of persons, whilst carrying smoke train devices, provided these are manufactured for this purpose.

Section 4 - Aerobatic flights (ABF)

SPO.SPEC.ABF.100 Standard operating procedures

The standard operating procedures for HEC shall specify:

(a) the equipment to be carried, including its operating limitations and appropriate entries in the MEL, as applicable;

(b) crew composition and experience requirements of crew members and task specialists;

(c) the relevant training for crew members and task specialists to perform their task and the qualification and nomination of persons providing such training to the crew members and task specialists;

(d) responsibilities and duties of crew members and task specialists;

(e) performance criteria necessary to be met to conduct aerobatic flights;

(f) normal, abnormal and emergency procedures.

SPO.SPEC.ABF.105 Documents, manuals and information to be carried

The following documents listed in SPO.GEN.140(a) do not have to be carried during aerobatic flights:

(a) details of the filed ATS flight plan, if applicable;

(b) current and suitable aeronautical charts for the route/area of the proposed flight and all routes along which it is reasonable to expect that the flight may be diverted;

(c) procedures and visual signals information for use by intercepting and intercepted aircraft; and

(d) information concerning search and rescue services for the area of the intended flight.

SPO.SPEC.ABF.115 Equipment

The following equipment requirements need not be applicable to aerobatic flights:

(a) first-aids kit as laid down in SPO.IDE.A.165 and SPO.IDE.H.165;

(b) hand-fire extinguishers as laid down in SPO.IDE.A.180 and SPO.IDE.H.180; and

(c) emergency locator transmitters or personal locator beacons as laid down in SPO.IDE.A.190 and SPO.IDE.H.190.

END

Affected Pages from Last Update

#	Page	Reference Section/Article	Amendmant
1.	8		[TABLE] 4 Mar 2021 NPA 2021-01 (Up to date with EASA Rev 13 (Oct. 2019)
2.	13	(a)(vii)	any navigational database required for PBN is suitable and current
3.	29		SPO.OP.210 Approach and landing conditions - aeroplanes ~~and helicopters~~
4.	29		Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the runway ~~or FATO~~ intended to be used would not prevent a safe approach, landing or missed approach.
5.	29		SPO.OP.211 Approach and landing conditions – helicopters
6.	29		Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the final approach and take-off area (FATO) intended to be used would not prevent a safe approach, landing or missed approach.
7.	35	Section 1 Aeroplanes (b)(8)	a simple PCDS used by a task specialist as a restraint device.
8.	36	Section 1 Aeroplanes (b)	for complex-motor-powered aeroplanes and for any aeroplane used in commercial operations, the operator is approved by the [Company] to operate the aeroplane within the constraints of the master minimum equipment list (MMEL); in accordance with point ORO.MLR.105(j) of this part ; or
9.	39	Section 1 Aeroplanes (b)(1)	the preceding 25 hours for aeroplanes with an MCTOM of more than 27 000 kg and first issued with an individual CofA on or after 1 January ~~2021~~2022; or
10.	40	Section 1 Aeroplanes (e)	SPO.IDE.A.146 Lightweight flight recorder
11.	40	Section 1 Aeroplanes (e)(a)	Turbine-engined aeroplanes with an MCTOM of 2 250 kg or more and aeroplanes with an MOPSC of more than 9 shall be equipped with a flight recorder if all the following conditions are met:
12.	40	Section 1 Aeroplanes (e)(a)	(1) they are not within the scope of point SPO.IDE.A.145(a);
13.	40	Section 1 Aeroplanes (e)(a)	(2) they are used for commercial operations;
14.	41	Section 1 Aeroplanes (e)(a)	(3) they are first issued with an individual CofA on or after 5 September 2022.
15.	41	Section 1 Aeroplanes (e)(b)	The flight recorder shall record, by means of flight data or images, information that is sufficient to determine the flight path and aircraft speed.
16.	41	Section 1 Aeroplanes (e)(c)	The flight recorder shall be capable of retaining the flight data and the images recorded during at least the preceding 5 hours.
17.	41	Section 1 Aeroplanes (e)(d)	The flight recorder shall automatically start to record prior to the aeroplane being capable of moving under its own power and shall stop automatically after the aeroplane is no longer capable of moving under its own power.
18.	41	Section 1 Aeroplanes (e)(e)	If the flight recorder records images or audio of the flight crew compartment, then a function shall be provided which can be operated by the pilot-in-command and which modifies image

#	Page	Reference Section/Article	Amendmant
			and audio recordings made before the operation of that function, so that those recordings cannot be retrieved using normal replay or copying techniques.
19.	41	Section 1 Aeroplanes (d)	If the recorder is not deployable, it shall have a device to assist in locating it under water. By 1 January ~~2018~~ 2020 at the latest, this device shall have a minimum underwater transmission time of 90 days. If the recorder is deployable, it shall have an automatic emergency locator transmitter.
20.	42	Section 1 Aeroplanes (Number deleted)	for other-than-complex motor-powered aeroplanes, a seat belt with upper torso restraint system on each flight crew seat, having a single point release for aeroplanes having a CofA first issued on or after 25 August 2016;~~.~~
21.	47	Section 1 Aeroplanes (e)	Aeroplanes shall be equipped with surveillance equipment in accordance with the applicable airspace requirements.
22.	48	Section 2 Helicopters (b)(7)	a simple PCDS used by a task specialist as a restraint device.
23.	48	Section 2 Helicopters (b)	for complex motor-powered helicopters, and for any helicopter used in commercial operations, the operator is approved by the [Company] to operate the helicopter within the constraints of the master minimum equipment list (MMEL) in accordance with point ORO.MLR.105(j) of this part; or
24.	51	Section 2 Helicopters (f)	If the CVR is not deployable, it shall have a device to assist in locating it under water. By 1 January ~~2018~~ 2020 at the latest, this device shall have a minimum underwater transmission time of 90 days. If the CVR is deployable, it shall have an automatic emergency locator transmitter.
25.	52	Section 2 Helicopters (e)	If the FDR is not deployable, it shall have a device to assist in locating it under water. By 1 January ~~2018~~ 2020 at the latest, this device shall have a minimum underwater transmission time of 90 days. If the FDR is deployable, it shall have an automatic emergency locator transmitter.
26.	52	Section 2 Helicopters (e)	SPO.IDE.H.146 Lightweight flight recorder
27.	52	Section 2 Helicopters (e)(a)	Turbine-engined helicopters with an MCTOM of 2 250 kg or more shall be equipped with a flight recorder if all the following conditions are met:
28.	52	Section 2 Helicopters (e)(a)	(1) they are within the scope of point SPO.IDE.H.145(a);
29.	52	Section 2 Helicopters (e)(a)	(2) they are used for commercial operations;
30.	52	Section 2 Helicopters (e)(a)	(3) they are first issued with an individual CofA on or after 5 September 2022.
31.	52	Section 2 Helicopters (e)(b)	The flight recorder shall record, by means of flight data or images, information that is sufficient to determine the flight path and aircraft speed.
32.	52	Section 2 Helicopters (e)(c)	The flight recorder shall be capable of retaining the flight data and the images recorded during at least the preceding 5 hours.
33.	52	Section 2 Helicopters (e)(d)	The flight recorder shall automatically start to record prior to the helicopter being capable of moving under its own power and shall stop automatically after the helicopter is no longer capable of moving under its own power.

#	Page	Reference Section/Article	Amendmant
34.	52	Section 2 Helicopters (e)(e)	If the flight recorder records images or audio of the flight crew compartment, then a function shall be provided which can be operated by the pilot-in-command and which modifies image and audio recordings made before the operation of that function, so that those recordings cannot be retrieved using normal replay or copying techniques.