LEGAL NOTICE NO ……..

CIVIL AVIATION ACT
(Act No……... of ……)

DRAFT CIVIL AVIATION (HELICOPTER OPERATIONS) REGULATIONS, 2019

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PART I
PRELIMINARY PROVISIONS

Title	1. These Regulations may be cited as the Civil Aviation (Operations- Helicopters) Regulations 2019,
Interpretation	2. In these Regulations, unless the context otherwise requires- "Aerial work" means an aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement, etc. "Aerodrome" means a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft. "Aircraft" means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface. "Aircraft operating manual" means a manual, acceptable to the Authority, containing normal, abnormal and emergency procedures, checklists, limitations, performance information, details of the aircraft systems and other material relevant to the operation of the aircraft. "Air operator certificate (AOC)" means a certificate authorizing an operator to carry out specified commercial air transport operations. "Air traffic service (ATS)" is a generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service). "Airworthy" means the status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation. "Alternate heliport" means a heliport to which a helicopter may proceed when it becomes either impossible or inadvisable to proceed to or to land at the heliport of intended landing where the necessary services and facilities are available, where aircraft performance requirements can be met and which is operational at the expected time of use. Alternate heliports include the following:

	Take-off alternate means an alternate heliport at which a helicopter would be able to land should this become necessary shortly after take-off and it is not possible to use the heliport of departure. En-route alternate means an alternate heliport at which a helicopter would be able to land in the event that a diversion becomes necessary while en route. Destination alternate means an alternate heliport at which a helicopter would be able to land should it become either impossible or inadvisable to land at the heliport of intended landing. “Approach and landing phase — helicopters” means that part of the flight from 300 m (1 000 ft) above the elevation of the FATO, if the flight is planned to exceed this height, or from the commencement of the descent in the other cases, to landing or to the balked landing point. ***Appropriate airworthiness requirements means*** the comprehensive and detailed airworthiness codes established, adopted or accepted by a Contracting State for the class of aircraft, engine or propeller under consideration. “Area navigation (RNAV)” means a method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these. “Cabin crew member” means a crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member. “Combined vision system (CVS)” means a system to display images from a combination of an enhanced vision system (EVS) and a synthetic vision system (SVS). “Commercial air transport operation” means an aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire. “Configuration deviation list (CDL)” means a list established by the organization responsible for the type design with the approval of the State of Design which identifies any external parts of an aircraft type which may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction.

	"Congested area" means in relation to a city, town or settlement, any area which is substantially used for residential, commercial or recreational purposes. "Congested hostile environment" means a hostile environment within a congested area. "Continuing airworthiness" means the set of processes by which an aircraft, engine, rotor or part complies with the applicable airworthiness requirements and remains in a condition for safe operation throughout its operating life. ***Continuing airworthiness records*** **means** records which are related to the continuing airworthiness status of an aircraft, engine, rotor or associated part. "Continuous descent final approach (CDFA)" means a technique, consistent with stabilized approach procedures, for flying the final approach segment of a non-precision instrument approach procedure as a continuous descent, without level-off, from an altitude/height at or above the final approach fix altitude/height to a point approximately 15 m (50 ft) above the landing runway threshold or the point where the flare manoeuvre should begin for the type of aircraft flown. "Crew member" means a person assigned by an operator to duty on an aircraft during a flight duty period. "Dangerous goods" means articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions. "Decision altitude (DA) or decision height (DH)" means a specified altitude or height in a three-dimensional (3D) instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established. "Defined point after take-off (DPATO)" means the point, within the take-off and initial climb phase, before which the helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required. "Defined point before landing (DPBL)" means the point, within the approach and landing phase, after which the helicopter's ability to continue the flight safely, with one engine inoperative, is not assured

	and a forced landing may be required. ***Duty*** **means** any task that flight or cabin crew members are required by the operator to perform, including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue. ***Duty period*** **means** a period which starts when a flight or cabin crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties. "Electronic flight bag (EFB)" An electronic information system, comprised of equipment and applications for flight crew, which allows for the storing, updating, displaying and processing of EFB functions to support flight operations or duties. "Elevated heliport" means a heliport located on a raised structure on land. "Emergency locator transmitter (ELT)" means a generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be activated automatically on impact or be manually, and An ELT may be any of the following: (a) Automatic fixed ELT (ELT(AF)) means an automatically activated ELT which is permanently attached to an aircraft. (b) Automatic portable ELT (ELT(AP)) means an automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft. (c) Automatic deployable ELT (ELT(AD)) means an ELT which is rigidly attached to an aircraft and which is automatically deployed and activated by impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided. (d) Survival ELT (ELT(S)) means an ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors. "Engine" means a unit used or intended to be used for aircraft propulsion. It consists of at least those components and equipment necessary for functioning and control, but excludes the propeller/rotors (if applicable). "Enhanced vision system (EVS)" means a system to display electronic real-time images of the external scene achieved through the use of image sensors.

	"En-route phase" means that part of the flight from the end of the take-off and initial climb phase to the commencement of the approach and landing phase. ***Fatigue*** **means** a physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to adequately perform safety-related operational duties. "Final approach and take-off area (FATO)" means a defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by helicopters operating in performance Class 1, the defined area includes the rejected take-off area available. "Final approach segment (FAS)" means that segment of an instrument approach procedure in which alignment and descent for landing are accomplished. "Flight crew member" means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period. ***Flight duty period*** **means** a period which commences when a flight or cabin crew member is required to report for duty that includes a flight or a series of flights and which finishes when the aircraft finally comes to rest and the engines are shut down at the end of the last flight on which the flight or cabin crew is a crew member "**Flight manual**" means a manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft. "Flight operations officer" herein also referred to as "flight dispatcher" means person designated by the operator to engage in the control and supervision of flight operations, whether licensed or not, suitably qualified in accordance with Civil Aviation (Personnel Licensing) Regulations who supports, briefs and/or assists the pilot-in-command in the safe conduct of the flight. "Flight plan" means a specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

	"Flight recorder" means any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation. Automatic deployable flight recorder (ADFR) means a combination flight recorder installed on the aircraft which is capable of automatically deploying from the aircraft. "Flight safety documents system" means a set of interrelated documentation established by the operator, compiling and organizing information necessary for flight and ground operations, and comprising, as a minimum, the operations manual and the operator's maintenance control manual. "Flight simulation training device" means any one of the following three types of apparatus in which flight conditions are simulated on the ground: A flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated; A flight procedures trainer, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class; A basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions. "Flight time — helicopters" means the total time from the moment a helicopter's rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped. "General aviation operation" means an aircraft operation other than a commercial air transport operation or an aerial work operation. "Ground handling" means services necessary for an aircraft's arrival at, and departure from, an airport, other than air traffic services.

	"Head-up display (HUD)" means a display system that presents flight information into the pilot's forward external field of view. "Helicopter" means a heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes. "Helideck" means a heliport located on a floating or fixed offshore structure. "Heliport" means an aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters. Heliport operating minima" means the limits of usability of a heliport for: take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions; landing in 2D instrument approach operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions; and landing in 3D instrument approach operations, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the type and/or category of the operation. "Hostile environment" An environment in which- (a) a safe forced landing cannot be accomplished because the surface and surrounding environment are inadequate; (b) the helicopter occupants cannot be adequately protected from the elements; (c) search and rescue response/capability is not provided consistent with anticipated exposure; or (d) there is an unacceptable risk of endangering persons or property on the ground. "Human Factors principles" means principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance. "Human performance" means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations. Instrument approach operations" means an approach and landing using instruments for navigation guidance based on an instrument approach

	procedure. There are two methods for executing instrument approach operations: a two-dimensional (2D) means instrument approach operation, using lateral navigation guidance only; and a three-dimensional (3D) means instrument approach operation, using both lateral and vertical navigation guidance. "Instrument approach procedure (IAP)" means a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply. Instrument approach procedures are classified as follows: (a) Non-precision approach (NPA) procedure means an instrument approach procedure designed for 2D instrument approach operations Type A. (b) Approach procedure with vertical guidance (APV) means a performance - based navigation (PBN) instrument approach procedure designed for 3D instrument approach operations Type A. (c) Precision approach (PA) procedure means An instrument approach procedure based on navigation systems (ILS, MLS, GLS and SBAS CAT I) designed for 3D instrument approach operations Type A or B. "Instrument meteorological conditions (IMC)" means Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions. "Integrated survival suit" means a survival suit which meets the combined requirements of the survival suit and life jacket. "Landing decision point (LDP)" means the point used in determining landing performance from which, an engine failure occurring at this point, the landing may be safely continued or a balked landing initiated. ***[Maintenance.†*** The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or

	combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair. ***or*** ***Maintenance.***†† The performance of tasks on an aircraft, engine, propeller or associated part required to ensure the continuing airworthiness of an aircraft, engine, propeller or associated part including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.] "Maintenance organization's procedures manual" means a document endorsed by the head of the maintenance organization which details the maintenance organization's structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems. "Maintenance programme" means a document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of those aircraft to which it applies. ***[Maintenance release.***† A document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner, either in accordance with the approved data and the procedures described in the maintenance organization's procedures manual or under an equivalent system. or ***Maintenance release.***†† A document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner in accordance with appropriate airworthiness requirements.] "Master minimum equipment list (MMEL)" means a list established for a particular aircraft type by the organization responsible for the type design with the approval of the State of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures. "Maximum mass" means maximum certificated take-off mass. "Minimum descent altitude (MDA) or minimum descent height (MDH)" means a specified altitude or height in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference. "Minimum equipment list (MEL)" means a list which provides for the

	operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type. ***"Modification"* means** a change to the type design of an aircraft, engine or propeller, and may include the embodiment of the modification which is a maintenance task subject to a maintenance release as per Civil Aviation (Airworthiness) Regulations. "Navigation specification" means a set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications: "Required navigation performance (RNP) specification" means navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH. "Area navigation (RNAV) specification" means a navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1. "Night" means the hours between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise, as may be prescribed by the appropriate authority. "Non-congested hostile environment" means a hostile environment outside a congested area. "Non-hostile environment" means an environment in which: a safe forced landing can be accomplished because the surface and surrounding environment are adequate; the helicopter occupants can be adequately protected from the elements; search and rescue response/capability is provided consistent with anticipated exposure; and the assessed risk of endangering persons or property on the ground is acceptable.

	"Obstacle clearance altitude (OCA) or obstacle clearance height (OCH)" means the lowest altitude or the lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable, used in establishing compliance with appropriate obstacle clearance criteria. "Offshore operations" means operations which routinely have a substantial proportion of the flight conducted over sea areas to or from offshore locations. Such operations include, but are not limited to, support of offshore oil, gas and mineral exploitation and sea-pilot transfer. "Operation" means an activity or group of activities which are subject to the same or similar hazards and which require a set of equipment to be specified, or the achievement and maintenance of a set of pilot competencies, to eliminate or mitigate the risk of such hazards. "Operational control" means the exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight. "Operational flight plan" means the operator's plan for the safe conduct of the flight based on considerations of helicopter performance, other operating limitations and relevant expected conditions on the route to be followed and at the heliports concerned. "Operations in performance Class 1" means Operations with performance such that, in the event of a critical engine failure, performance is available to enable the helicopter to safely continue the flight to an appropriate landing area, unless the failure occurs prior to reaching the take-off decision point (TDP) or after passing the landing decision point (LDP), in which cases the helicopter must be able to land within the rejected take-off or landing area. "Operations in performance Class 2" means operations with performance such that, in the event of critical engine failure, performance is available to enable the helicopter to safely continue the flight to an appropriate landing area, except when the failure occurs early during the take-off manoeuvre or late in the landing manoeuvre, in which cases a forced landing may be required. "Operations in performance Class 3" means operations with performance such that, in the event of an engine failure at any time during the flight, a forced landing will be required. "Operations manual" means manual containing procedures, instructions

	and guidance for use by operational personnel in the execution of their duties. "Operations specifications" means the authorizations, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual. "Operator" means the person, organization or enterprise engaged in or offering to engage in an aircraft operation. "Operator's maintenance control manual" means a document which describes the operator's procedures necessary to ensure that all scheduled and unscheduled maintenance is performed on the operator's aircraft on time and in a controlled and satisfactory manner. "Performance-based communication (PBC)" means communication based on performance specifications applied to the provision of air traffic services. "Performance-based navigation (PBN)" means Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace. "Performance-based surveillance (PBS)" means Surveillance based on performance specifications applied to the provision of air traffic services. "Pilot-in-command" means the pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight. "Point of no return" means the last possible geographic point at which an aircraft can proceed to the destination aerodrome as well as to an available en-route alternate aerodrome for a given flight. "Psychoactive substances" means Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded. ***[Repair.***† The restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the type certificate for the respective aircraft type, after it has been damaged or subjected to wear.

	or ***Repair.***†† The restoration of an aircraft, engine or associated part to an airworthy condition in accordance with the appropriate airworthiness requirements after it has been damaged or subjected to wear.] "Required communication performance (RCP) specification" means a set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication. "Required surveillance performance (RSP) specification" means a set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance. ***Rest period means*** a continuous and defined period of time, subsequent to and/or prior to duty, during which flight or cabin crew members are free of all duties. "Runway visual range (RVR)" means the range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line. "Safe forced landing" means unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface. "Safety management system (SMS)" means a systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures. "Series of flights" means consecutive flights that: (a) begin and end within a period of 24 hours; and (b) are all conducted by the same pilot-in-command. "State of Registry" means the State on whose register the aircraft is entered. "State of the Aerodrome" means the State in whose territory the aerodrome is located.

	" State of Operator" means the State in which the operator's principal place of business is located or; if there is no such place of business, the operator permanent residence. "Synthetic vision system (SVS)" means a system to display data-derived synthetic images of the external scene from the perspective of the flight deck. "Take-off and initial climb phase" means that part of the flight from the start of take-off to 300 m (1 000 ft) above the elevation of the FATO, if the flight is planned to exceed this height, or to the end of the climb in the other cases. "Take-off decision point (TDP)" means the point used in determining take-off performance from which, an engine failure occurring at this point, either a rejected take-off may be made or a take-off safely continued. "Visual meteorological conditions (VMC)" means Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling,* equal to or better than specified minima. "VTOSS" means the minimum speed at which climb shall be achieved with the critical engine inoperative, the remaining engines operating within approved operating limits.
Applicability	3. These Regulations shall be applicable to all helicopters engaged in commercial air transport operations, general aviation operations, , except helicopters engaged in aerial work.

PART II: COMMERCIAL AIR TRANSPORT

Compliance with laws, regulations and procedures	4. (1)The operator shall ensure that all employees when abroad know that they must comply with the laws, regulations and procedures of those States in which their operations are conducted.
	(2)The operator shall ensure that all pilots are familiar with the laws, regulations and procedures pertinent to the performance of their duties prescribed for the areas to be traversed, the heliports to be used and the air navigation facilities relating thereto.

	(3)The operator shall ensure that other members of the flight crew are familiar with these Regulations and operator procedures as are pertinent to the performance of their respective duties in the operation of the helicopter.
	(4)The operator or a designated representative shall have responsibility for operational control.
	(5)Responsibility for operational control shall be delegated only to the pilot-in-command and to a flight operations officer[flight dispatcher] if the operator's approved method control and supervision of flight operations requires the use of flight operations officer[flight dispatcher] personnel.
	(6)Where an emergency situation which endangers the safety of the helicopter or persons becomes known first to the flight operations officer[flight dispatcher], action by that person in accordance with Regulations 45 shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required. (7)Where an emergency situation which endangers the safety of the helicopter or persons necessitates the taking of action which involves a violation of local regulations or procedures, the pilot-in-command shall notify the appropriate local authority without delay.
	(8)Where required by the State in which the incident occurs, the pilot-in-command shall, within ten days, submit a report on any such violation of local regulation and procedures to the appropriate authority of that State and a copy thereto to the Authority..
	(9)Operators shall ensure that pilots-in-command have available on board the helicopter all the essential information concerning the search and rescue services in the area over which the helicopter will be flown.
	(10)Operators shall ensure that flight crew members demonstrate the ability to speak and understand the language used for radiotelephony communications as specified in Civil Aviation (Personnel Licensing) Regulations.
	(11) Operators shall ensure that a helicopter- (a) has equipments and instruments; (b) has communication, navigation and surveillance equipment, in the manner provided in the Civil Aviation (Instrument and Equipments) Regulations.
Compliance by a foreign operator with laws regulations and procedures of the	5. (1) When the Authority identifies a case of non-compliance or suspected non-compliance by a foreign operator with laws, regulations and applicable procedures, or a similar serious safety issue with that operator, the Authority shall immediately notify the operator and, if the issue warrants it, the State of the Operator.

Authority	(2) Where the Authority State of Operator and the State of Registry are different, the notification under sub regulation (1) shall also be made to the State of Registry, if the issue falls within the responsibilities of that State and warrants a notification.
	(3) In the case of notification to States as specified in sub regulations (1), if the issue and its resolution warrant it, the State in which the operation is conducted shall engage in consultations with the Authority and the State of Registry, as applicable, concerning the safety standards maintained by the operator.
Safety management	6. (1)The operator of a helicopter of a certified take-off mass in excess of 7000 kg or having a passenger seating configuration of more than 9 and fitted with a flight data recorder should establish and maintain a flight data analysis programme as part of its safety management system.
	(2) [Until 6 November 2019,] a flight data analysis programme shall be non-punitive and contain adequate safeguards to protect the source(s) of the data.
	(3)[As of 7 November 2019,] a flight data analysis programme shall contain adequate safeguards to protect the source(s) of the data in accordance with Civil Aviation (Safety Management) Regulations
	(4) [Until 6 November 2019,[the operator shall establish a flight safety documents system, for the use and guidance of operational personnel, as part of its safety management system. (5) [As of 7 November 2019,] States shall not allow the use of recordings or transcripts of CVR, CARS, Class A AIR and Class A AIRS for purposes other than the investigation of an accident or incident as per Civil Aviation (Accidents and Incidents Investigation)Regulations, except where the recordings or transcripts are: (a) related to a safety-related event identified in the context of a safety management system; are restricted to the relevant portions of a de-identified transcript of the recording; and are subject to the protections accorded by Civil Aviation (Safety Management) Regulations; (b) sought for use in criminal proceedings not related to an event involving an accident or incident investigation and are subject to the protections accorded by SMS regulations; or (c) used for inspections of flight recorder systems.
	(5) [As of 7 November 2019] the operator shall establish a flight safety documents system, for the use and guidance of operational personnel, as part of its safety management system.
Dangerous Good	7. The operator shall ensure adherence to the provisions for carriage of dangerous goods as contained in Civil Aviation (Air Operator Certification & Administration) Regulations.
Use of	8. The operator shall ensure that the provisions concerning the use of psychoactive

Psychoactive substances	substances as contained in Civil Aviation (Personnel Licensing) Regulations are adhered to.
PART III - FLIGHT OPERATIONS	
Operating facilities	9. (1) The operator shall ensure that a flight will not be commenced unless it has been ascertained by every reasonable means available that the ground or water facilities available and directly required on such flight, for the safe operation of the helicopter and the protection of the passengers, are adequate for the type of operation under which the flight is to be conducted and are adequately operated for this purpose.
	(2) The operator shall ensure that any inadequacy of facilities observed in the course of operations is reported to the responsible authority without undue delay.
Operational Certification and supervision - The air operator certificate	10. (1)The operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate issued by the Authority.
	(2)The air operator certificate shall authorize the operator to conduct commercial air transport operations in accordance with the operations specifications.
	(3)The issuance of an air operator certificate by the Authority shall be dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations, training programme as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified.
	(4)The continued validity of an air operator certificate shall depend upon the operator maintaining the requirements of sub regulation (3) under the supervision of the Authority.
	(5)The air operator certificate shall contain at least the following information and shall follow the layout of the First Schedule to the Civil Aviation (Air Operator Certification and Administration) Regulations: (a) the State of the Operator and the issuing Authority; (b) the air operator certificate number and its expiration date (c) the operator name, trading name (if different) and address of the principal place of business; (d) the date of issue and the name, signature and title of the authority representative; and (e) the location, in a controlled document carried on board, where the contact details of operational management can be found.
	(6)The operations specifications associated with the air operator certificate shall contain at least the information listed in the Second Schedule to the Civil

	Aviation (Air Operator Certification and Administration) Regulations.
	(7)Air operator certificates and their associated operations specifications shall follow the layouts in the Second Schedule to the Civil Aviation (Air Operator Certification and Administration) Regulations.
	(8)The Authority shall establish a system for both the certification and the continued surveillance of the operator in accordance with Civil Aviation (Air Operator Certification and Administration) and Civil Aviation (Safety Management) Regulations to ensure that the required standards of operations established in this regulation are maintained.
Surveillance of operations by a foreign operator	11. (1) [State] shall recognize as valid an air operator certificate issued by another Contracting State provided that the requirements under which the certificate was issued are at least equal to the applicable Standards specified in these regulations and the Civil Aviation (Safety Management) Regulations.
	(2) The Authority shall establish a programme with procedures for the surveillance of operations in the territory by a foreign operator and for taking appropriate action when necessary to preserve safety.
	(3) The foreign operator shall meet and maintain the requirements established by the Authority in which the operations are conducted.
Operations manual	12. (1)The operator shall provide for the use and guidance of operations personnel concerned, an operations manual constructed using the guidance contained in the Third Schedule to the Civil Aviation (Air Operator Certification and Administration) Regulations.
	(2)The operations manual shall be amended or revised as is necessary to ensure that the information contained therein is kept up to date and all such amendments or revisions shall be issued to all personnel that are required to use the manual.
	(3)The Authority shall establish a requirement for the operator to provide a copy of the operations manual together with all amendmentsand revisions for review, acceptance and where required, approval.
	(4)The operator shall incorporate in the operations manual such mandatory material as the Authority may require.
Operating instructions — General	13. (1) The operator shall ensure that all operations personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole.
	(2) A helicopter rotor shall not be turned under power, for the purpose of flight,

	without a qualified pilot at the controls.
	(3) The operator shall provide appropriately specific training and procedures to be followed for all personnel, other than qualified pilots, who are likely to carry out the turning of a rotor under power for purposes other than flight.
	(4)The operator shall issue operating instructions and provide information on helicopter climb performance with all engines operating to enable the pilot-in-command to determine the climb gradient that can be achieved during the take-off and initial climb phase for the existing take-off conditions and intended take-off technique.
	(5)The information provided in sub-regulation (4) shall be based on the helicopter manufacturer's or other data, acceptable to the Authority, and the information shall be included in the operations manual.
In-flight simulation of emergency situations	14. The operator shall ensure that when passengers or cargo are being carried, no emergency or abnormal situations shall be simulated.
Checklists	15. (1)The normal, abnormal and emergency procedures checklists shall be used by flight crews prior to, during and after all phases of operations, and in emergency, to ensure compliance with the operating procedures contained in the aircraft operating manual, the helicopter flight manual or other documents associated with the certificate of airworthiness and otherwise in the operations manual.
	(2)The design and utilization of checklists shall observe Human Factors principles.
Minimum flight altitudes (operations under IFR)	16. (1) The operator shall be permitted to establish minimum flight altitudes for those routes flown for which minimum flight altitudes have been established by the State flown over or the Authority, provided that they shall not be less than those established by that State, unless specifically approved by the State flown over.
	(2)The operator shall specify the method by which it is intended to determine minimum flight altitudes for operations conducted over routes for which minimum flight altitudes have not been established by the State flown over, or the Authority, and shall include the method in the operations manual.
	(3)The minimum flight altitudes determined in accordance with sub-regulation (2) shall not be lower than the minimum flight altitudes specified in Civil

	Aviation (Rules of the Air) Regulations.
	(4)The method for establishing the minimum flight altitudes shall be approved by the Authority.
	(5)The Authority shall approve such method only after consideration of the probable effects of the following factors on the safety of the operation: (a) the accuracy and reliability with which the position of the helicopter can be determined; (b) the inaccuracies in the indications of the altimeters used; (c) the characteristics of the terrain such as sudden changes in the elevation; (d) the probability of encountering unfavourable meteorological conditions, such assevere turbulence and descending air currents; (e) possible inaccuracies in aeronautical charts; and (f) airspace restrictions.
Heliport or landing location operating minima	17. (1)The operator shall establish operating minima for each heliport or landing location to be used in operations and the method of determination of such minima shall be approved by the Authority.
	(2)the operating minima shall not be lower than any that may be established for such heliports or landing locations by the State of the Aerodrome, except when specifically approved by that State.
	(3)The Authority may approve operational credit for operations with helicopters equipped with automatic landing systems, a HUD or equivalent displays, EVS, SVS or CVS and such approvals shall not affect the classification of the instrument approach procedure.
	(4)The Authority shall require that in establishing the operating minima for each heliport or landing location which will apply to any particular operation, full account shall be taken of the following: (a) the type, performance and handling characteristics of the helicopter; (b) the composition of the flight crew, their competence and experience; (c) the physical characteristics of the heliport, and direction of approach; (d) the adequacy and performance of the available visual and non-visual ground aids; (e) the equipment available on the helicopter for the purpose of navigation, acquisition of visual references and control of the flight path during the approach, landing and missed approach; (f) the obstacles in the approach and missed approach areas and the obstacle clearance altitude/height for the instrument approach procedures; (g) the means used to determine and report meteorological conditions; and (h) the obstacles in the climb-out areas and necessary clearance margins.
	(5)Instrument approach operations shall be classified based on the designed lowest operating minima below which an approach operation shall only be

	continued with the required visual reference as follows: (a) Type A: a minimum descent height or decision height at or above 75 m (250 ft); and (b) Type B: a decision height below 75 m (250 ft). Type B instrument approach operations are categorized as: (i) Category I (CAT I): a decision height not lower than 60 m (200 ft) and with either a visibility not less than 800 m or a runway visual range not less than 550 m; (ii) Category II (CAT II): a decision height lower than 60 m (200 ft), but not lower than 30 m (100 ft) and a runway visual range not less than 300 m; (iii) Category IIIA (CAT IIIA): a decision height lower than 30 m (100 ft) or no decision height and a runway visual range not less than 175 m; (c) Category IIIB (CAT IIIB): a decision height lower than 15 m (50 ft), or no decision height and a runway visual range less than 175 m but not less than 50 m; and (d) Category IIIC (CAT IIIC): no decision height and no runway visual range limitations.
	(6)Category II and Category III instrument approach operations shall not be authorized unless RVR information is provided.
	(7)For instrument approach operations, heliport or landing location operating minima below 800 m visibility shall not be authorized unless RVR information or an accurate measurement or observation of visibility is provided.
	(8)The operating minima for 2D instrument approach operations using instrument approach procedures shall be determined by establishing a minimum descent altitude (MDA) or minimum descent height (MDH), minimum visibility and, where necessary, the cloud conditions. (9)The operating minima for 3D instrument approach operations using instrument approach procedures shall be determined by establishing a decision altitude (DA) or decision height (DH) and the minimum visibility or RVR.
Fuel and oil records	18. (1) The operator shall maintain fuel and oil records to enable the Authority to ascertain that, for each flight, the requirements of regulation 30 have been complied with.
	(2)Fuel and oil records shall be retained by the operator for a period of [six] months.
Crew – Pilot-in-Command	19. For each flight, the operator shall designate one pilot to act as pilot-in-command.

Passengers	20. (1)The [operator/Pilot-in-command] shall ensure that passengers are made familiar with the location and use of: (a) seat belts or harnesses; (b) emergency exits; (c) life jackets, if the carriage of life jackets is prescribed; (d) oxygen dispensing equipment, if the provision of oxygen for the use of passengers is prescribed; and (e) other emergency equipment provided for individual use, including passenger emergency briefing cards
	(2)The [operator/Pilot-in-command] shall ensure that the passengers are informed of the location and general manner of use of the principal emergency equipment carried for collective use.
	(3)The [operator/Pilot-in-command] shall ensure that in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.
	(4)The [operator/Pilot-in-command] shall ensure that, during take-off and landing and whenever considered necessary by reason of turbulence or any emergency occurring during flight, all passengers on board a helicopter shall be secured in their seats by means of the seat belts or harnesses provided.
Over-water flights	21. (1)All helicopters on flights over water in a hostile environment in accordance with these regulations shall be certificated for ditching.
	(2) Sea state shall be an integral part of ditching information.
Flight preparation	22. (1) A flight, or series of flights, shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is satisfied that: (a) the helicopter is airworthy; (b) the instruments and equipment prescribed in Civil Aviation (Instrument & Equipment) Regulations, for the particular type of operation to be undertaken, are installed and are sufficient for the flight; (c) a maintenance release as prescribed in Civil Aviation (Air Operator Certification and Administration) Regulations has been issued in respect of the helicopter; (d) the mass of the helicopter and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected; (e) any load carried is properly distributed and safely secured; (f) a check has been completed indicating that the operating limitations as described in these regulations can be complied with for the flight to be undertaken; and (g) Requirements relating to operational flight planning have been complied with.

	(2)Completed flight preparation forms shall be kept by the operator for a period of six months.
Operational flight planning	23. (1)An operational flight plan shall be completed for every intended flight or series of flights, and approved by the pilot-in-command, and shall be lodged with the appropriate authority.
	(2)The operator shall determine the most efficient means of lodging the operational flight plan.
	(3)The operations manual shall describe the content and use of the operational flight plan.
Take-off alternate heliport	24. (1)A take-off alternate heliport shall be selected and specified in the operational flight plan if the weather conditions at the heliport of departure are at or below the applicable heliport operating minima.
	(2)When a heliport is selected as a take-off alternate, the available information shall indicate that, at the estimated time of use, the conditions will be at or above the heliport operating minima for that operation.
Destination alternate heliport	25. (1)When a flight is conducted in accordance with IFR, at least one destination alternate shall be specified in the operational flight plan and the flight plan, unless: (a) the duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the estimated time of arrival at the heliport of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions as prescribed by the Authority; or (b) the heliport of intended landing is isolated and no alternate is available. (c) A point of no return (PNR) is determined.
	(2) Where a heliport is selected as a destination alternate, the available information shall indicate that, at the estimated time of use, the conditions will be at or above the heliport operating minima for that operation.
	(3)Where a flight departs to a destination which is forecast to be below the heliport operating minima, two destination alternates shall be selected.
	(4)Notwithstanding sub-regulation (3), the first destination alternate shall be at or above the heliport operating minima for destination and the second at or above the heliport operating minima for alternate.
	(5) When an offshore alternate heliport is specified, it shall be specified subject to the following: (a) the offshore alternate heliport shall be used only after a PNR. Prior to a PNR, onshore alternate heliports shall be used; (b) mechanical reliability of critical control systems and critical components shall be considered and taken into account when determining the suitability

	of the alternate heliport; (c) one engine inoperative performance capability shall be attainable prior to arrival at the alternate heliport; (d) to the extent possible, deck availability shall be guaranteed; and (e) weather information must be reliable and accurate.
	(6) Offshore alternate heliports shall not be used when it is possible to carry enough fuel to have an onshore alternate.
	(7) Offshore alternate heliports should not be used in a hostile environment.
Meteorological conditions - VFR	26. A flight to be conducted in accordance with VFR shall not be commenced unless current meteorological reports or a combination of current reports and forecasts indicate that the meteorological conditions along the route or that part of the route to be flown or in the intended area of operations under VFR will, at the appropriate time, be such as to enable compliance with these regulations.
Meteorological conditions - IFR	27. A flight to be conducted in accordance with IFR shall not be commenced unless information is available which indicates that conditions at the destination heliport or landing location or, when an alternate is required, at least one alternate heliport will, at the estimated time of arrival, be at or above the heliport operating minima.
Visibility	28. To ensure that an adequate margin of safety is observed in determining whether or not an approach and landing can be safely carried out at each alternate heliport or landing location, the operator shall specify appropriate incremental values for height of cloud base and visibility, acceptable to the Authority, to be added to the operator's established heliport or landing location operating minima.
Icing Conditions	29. (1) A flight to be operated in known or expected icing conditions shall not be commenced unless the helicopter is certificated and equipped to cope with such conditions.
	(2) A flight to be planned or expected to operate in suspected or known ground icing conditions shall not be commenced unless the helicopter has been inspected for icing and, if necessary, has been given appropriate de-icing or anti-icing treatment.
	(3) Accumulation of ice or other naturally occurring contaminants shall be removed so that the helicopter is kept in an airworthy condition prior to take-off.
Fuel and oil requirements	30. (1) No helicopter flight shall be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the

	helicopter carries sufficient fuel and oil to ensure that it can safely complete the flight.
	(2) Notwithstanding sub-regulation (1), a reserve shall be carried to provide for contingencies.
VFR Operations	31. The fuel and oil carried in order to comply with regulation 30 shall, in the case of VFR operations, be at least the amount to allow the helicopter to: (a) fly to the landing site to which the flight is planned; (b) have final reserve fuel to fly thereafter for a period of 20 minutes at best-range speed; and (c) have an additional amount of fuel to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Authority.
IFR Operations	32. (1) The fuel and oil carried in order to comply with regulations 30 shall, in the case of IFR operations, be at least the amount to allow the helicopter: (a) When an alternate is not required, in accordance with regulation 25 to fly to and execute an approach at the heliport or landing location to which the flight is planned, and thereafter to have: (i) final reserve fuel to fly 30 minutes at holding speed at 450 m (1 500 ft) above the destination heliport or landing location under standard temperature conditions and approach and land; and (ii) an additional amount of fuel to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Authority. (b) When an alternate is required, to fly to and execute an approach, and a missed approach, at the heliport or landing location to which the flight is planned, and thereafter: (i) fly to and execute an approach at the alternate specified in the flight plan; and then (ii) have final reserve fuel to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate under standard temperature conditions, and approach and land; and (iii) have an additional amount of fuel to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Authority. (c) When no alternate heliport or landing location is available, with respect to regulation 25, in circumstances including when. the destination is isolated, sufficient fuel shall be carried to enable the helicopter to fly to the destination to which the flight is planned and thereafter for a period

	that will, based on geographic and environmental considerations, enable a safe landing to be made.
	(2) In computing the fuel and oil required in regulation 30, at least the following shall be considered: (a) meteorological conditions forecast; (b) expected air traffic control routings and traffic delays; (c) for IFR flight, one instrument approach at the destination heliport, including a missed approach; (d) the procedures prescribed in the operations manual for loss of pressurization, where applicable, or failure of one engine while en route; and (e) any other conditions that may delay the landing of the helicopter or increase fuel or oil consumption.
	(3)The use of fuel after flight commencement for purposes other than originally intended during pre-flight planning shall require a re-analysis and, if applicable, adjustment of the planned operation.
Refuelling with passengers on board or rotors turning	33. (1) A helicopter shall not be refuelled, rotors stopped or turning, when: (a) passengers are embarking or disembarking; or (b) oxygen is being replenished
	(2) When the helicopter is refuelled with passengers on board, rotors stopped or turning, it shall be properly attended by sufficient qualified personnel, ready to initiate and direct an evacuation of the helicopter by the most practical, safe and expeditious means available. (3)In order to achieve the requirements of sub regulation (2): (a) the flight crew shall ensure that the passengers are briefed on what actions to take if an incident occurs during refuelling; (b) a constant two-way communication shall be maintained by the helicopter's intercommunication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the helicopter; and (c) during an emergency shutdown procedure, the flight crew shall ensure that any personnel or passengers outside the helicopter are clear of the rotor area.
	(4) The operator shall establish procedures and specify conditions under which such refuelling may be carried out.
	(5) In addition to the requirements of sub regulation (2), operational procedures shall specify that at least the following precautions are taken: (a) doors on the refuelling side of the helicopter remain closed where possible, unless these are the only suitable exits; (b) doors on the non-refuelling side of the helicopter remain open, weather permitting, unless otherwise specified by the RFM;

(c) fire-fighting facilities of the appropriate scale be positioned so as to be immediately available in the event of a fire;
(d) if the presence of fuel vapour is detected inside the helicopter, or any other hazard arises during refuelling, fueling shall be stopped immediately;
(e) the ground or deck area beneath the exits intended for emergency evacuation be kept clear;
(f) seat belts should be unfastened to facilitate rapid egress; and
(g) when rotors are turning, only ongoing passengers shall remain on board.

(5) A helicopter shall not be refuelled with AVGAS (aviation gasoline) or wide-cut type fuel or a mixture of these types of fuel, when passengers are on board.

(6) A helicopter shall not be defueled at any time when:
(a) passengers remain on board; or
(b) passengers are embarking or disembarking; or
(c) oxygen is being replenished.

Oxygen supply

34. (1)Approximate altitudes in the Standard Atmosphere corresponding to the values of absolute pressure used in the text are as follows:

Absolute pressure	Metres	Feet
700 hPa	*3 000*	*10000*
620 hPa	*4 000*	*13000*
376 hPa	*7 600*	*25000*

to be operated at flight altitudes at which the atmospheric pressure in compartments will be less than 700 hPa shall not be commenced cient stored breathing oxygen is carried to supply:

a) all crew members and 10 per cent of the passengers for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hPa and 620 hPa; and
b) the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa.

(3)A flight to be operated with a pressurized helicopter shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all the crew members and passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressurization, for any period that the atmospheric pressure in any compartment occupied by them would be less than 700 hPa.

(4)Where the helicopter is operated at flight altitudes at which the atmospheric pressure is more than 376 hPa and cannot descend safely to a flight altitude at which the atmospheric pressure is equal to 620 hPa within four minutes, there shall be no less than a 10-minute supply for the occupants of the passenger compartment.

In-flight procedures – Heliport Operating Minima	35. (1)A flight shall not be continued towards the heliport of intended landing, unless the latest available information indicates that at the expected time of arrival, a landing can be effected at that heliport, or at least one destination alternate heliport, in compliance with the operating minima established in accordance with regulation 17.
	(2)An instrument approach shall not be continued below 300 m (1 000 ft) above the heliport elevation or into the final approach segment unless the reported visibility or controlling RVR is at or above the heliport operating minima
	(3)Where, After entering the final approach segment or after descending below 300 m (1 000 ft) above the heliport elevation, the reported visibility or controlling RVR falls below the specified minimum, the approach may be continued to DA/H or MDA/H.
	(4)A helicopter shall not continue its approach-to-land at any heliport beyond a point at which the limits of the operating minima specified for that heliport would be infringed.
Meteorological Observations	36. The procedures for making meteorological observations on board helicopter in flight and for recording and reporting them are contained in the Civil Aviation (Meteorology Services for Air Navigation) Regulations and any other relevant publications issued by the Authority
Hazardous flight conditions	37. Hazardous flight conditions encountered, other than those associated with meteorological conditions, shall be reported to the appropriate aeronautical station as soon as possible, and such reports rendered shall give details pertinent to the safety of other aircraft.
Flight crew members at duty stations	38. ***(1)*** All flight crew members required to be on flight deck duty shall be at their stations during take-off and landing.
	(2) during en route phase of a flight, all flight crew members required to be on flight deck duty shall remain at their stations except when their absence is necessary for the performance of duties in connection with the operation of the helicopter or for physiological needs.
	(3) flight crew members shall keep their seat belt fastened when at their stations.
	(4) Flight crew member occupying a pilot's seat shall keep the safety harness fastened during the take-off and landing phases;
	(5) All other flight crew members shall keep their safety harness fastened during the take-off and landing phases unless the shoulder straps interfere with the

	performance of their duties, in which case the shoulder straps may be unfastened but the seat belt must remain fastened.
Use of oxygen	39. All flight crew members, when engaged in performing duties essential to the safe operation of a helicopter in flight, shall use breathing oxygen continuously whenever the circumstances prevail for which its supply has been required in accordance with regulation 34.
Safeguarding of cabin crew and passengers in pressurized helicopter in the event of loss of pressurization	40. (1)Cabin crew shall be safeguarded so as to ensure reasonable probability of their retaining consciousness during any emergency descent which may be necessary in the event of loss of pressurization and, they shall have such means of protection as to enable them administer first aid to passengers during stabilized flight following the emergency.
	(2)Passengers shall be safeguarded by such devices or operational procedures to ensure reasonable probability of their surviving the effects of hypoxia in the event of loss of pressurization.
Instrument flight procedures	41. (1) The Authority shall approve and promulgate one or more instrument approach procedures designed to support instrument approach operations in which the heliport is located to serve each instrument runway or aerodrome utilised for instrument flight operations
	(2)All helicopters operated in accordance with IFR shall comply with the instrument approach procedures approved by the Authority in which the heliport is located, or by the State which is responsible for the heliport when located outside the territory of State.
Helicopter operating procedures for noise abatement	42. The operator shall ensure that take-off and landing procedures take into account the need to minimize the effect of helicopter noise.
In-flight fuel management	43. (1)The operator shall establish policies and procedures, approved by the Authority, to ensure that in-flight fuel checks and fuel management are performed.
	(2)The pilot-in-command shall monitor the amount of usable fuel remaining on board to ensure it is not less than the fuel required to proceed to a landing site where a safe landing can be made with the planned final reserve fuel remaining.
	(3)The pilot-in-command shall advise ATC of a minimum fuel state by declaring

	MINIMUM FUEL when, having committed to land at a specific landing site, the pilot calculates that any change to the existing clearance to that landing site, or other air traffic delays, may result in landing with less than the planned final reserve fuel.
	(4)The pilot-in-command shall declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL, when the usable fuel estimated to be available upon landing at the nearest landing site where a safe landing can be made is less than the required final reserve fuel in compliance with regulation 30.
Duties of pilot-in-command	44. (1)The pilot-in-command shall be responsible for the operation and safety of the helicopter and for the safety of all crew members, passengers and cargo on board, from the moment the engine are started until the helicopter finally comes to rest at the end of the flight, with the engine shut down and the rotor blades stopped.
	(2)The pilot-in-command shall ensure that the checklists specified in regulation 15 are complied with in detail.
	(3)The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the helicopter, resulting in serious injury or death of any person or substantial damage to the helicopter or property in accordance with Civil Aviation (Aircraft Accident and Incident Investigation) Regulations.
	(4)The pilot-in-command shall be responsible for reporting all known or suspected defects in the helicopter, to the operator, at the termination of the flight.
	(5)The pilot-in-command shall be responsible for the journey log book or the general declaration containing the information require regulation 105.
Duties of flight operations officer[flight dispatcher]	45. (1)A flight operations officer[flight dispatcher] in conjunction with a method of control and supervision of flight operations in accordance with Civil Aviation(Air Operator Certification and Administration) Regulations shall: (a) assist the pilot-in-command in flight preparation and provide the relevant information; (b) assist the pilot-in-command in preparing the operational and ATS flight plans, sign when applicable and file the ATS flight plan with the appropriate ATS unit; and (c) furnish the pilot-in-command while in flight, by appropriate means, with information which may be necessary for the safe conduct of the flight.
	(2)In the event of an emergency, a flight operations officer[flight dispatcher] shall:

	a)initiate such procedures as outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and b)convey safety-related information to the pilot-in-command that may be necessary for the safe conduct of the flight, including information related to any amendments to the flight plan that become necessary in the course of the flight.
	(3)The Pilot-in-command shall convey relevant information to the flight operations officer / flight dispatcher during a course of flight, particularly in the context of emergency situations.
Carry-on baggage	46. The operator shall ensure that all baggage carried onto a helicopter and taken into the passenger cabin is adequately and securely stowed.
[FATIGUE MANAGEMENT	47. (1) The Operator shall establish and implement fatigue management programmme that ensures all operator pessonnel involved in the operation and maintenance of the helicopter do not carry out their duties when fatigued.
	(2) The programme refered to under sub regulation (1) shall address flight and duty times and be included in the operations manual
PART IV - HELICOPTER PERFORMANCE OPERATING LIMITATIONS	
General	48. (1)Helicopters shall be operated in accordance with a comprehensive and type certification under the Civil Aviation (Airworthiness) Regulations
	(2)In conditions where the safe continuation of flight is not ensured in the event of a critical engine failure, helicopter operations shall be conducted in a manner that gives appropriate consideration for achieving a safe forced landing.
	(3)Where the Authority permits IMC operations in performance Class 3, such operations shall be conducted in accordance with the provisions of these regulations
	(4) helicopters for which application for certification was submitted on or after 22nd March , 19191 but before 13th December 2007 and helicopters for which application for certification was submitted on or after 13th December 2007 iis not applicable because of the exemption provided for in Article 41 of the Convention, the State of the Operator shall ensure that the level of performance specified in regulation 49 is met as far as practicable.
	(5)Where helicopters are operated to or from heliports in a congested hostile environment, the operator shall comply with the requirements specified by the competent authority of the State in which the heliport is situated to enable these operations to be conducted in a manner that gives appropriate consideration for the risk associated with an engine failure.
Applicable to helicopters certificated in accordance with	49. (1) The provisions contained in these regulations are applicable to the helicopters to which the airworthiness standards are applicable.
	(2)The level of performance defined by the appropriate parts of the code of performance referred to in these regulations for the helicopters shall be

Civil Aviation (Airworthiness) regulations	consistent with the overall level embodied in the regulations of this part.
	(3)A helicopter shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.
	(4)The Authority shall take such precautions as are reasonably possible to ensure that the general level of safety contemplated by these provisions is maintained under all expected operating conditions, including those not covered specifically by the provisions of these regulations.
	(4)A flight shall not be commenced unless the performance information provided in the flight manual indicates that these regulations can be complied with for the flight to be undertaken.
	(5)In applying these regulations, account shall be taken of all factors that significantly affect the performance of the helicopter (such as: mass, operating procedures, the pressure-altitude appropriate to the elevation of the operating site, temperature, wind and condition of the surface).
	(6)Such factors shall be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the code of performance in accordance with which the helicopter is being operated.
Mass limitations	50. (1)The mass of the helicopter at the start of take-off shall not exceed the mass at which the code of performance referred to in these regulations is complied with, allowing for expected reductions in mass as the flight proceeds and for such fuel jettisoning as is appropriate.
	(2)In no case shall the mass at the start of take-off exceed the maximum take-off mass specified in the helicopter flight manual taking into account the factors specified in these regulations
	(3)In no case shall the estimated mass for the expected time of landing at the destination and at any alternate exceed the maximum landing mass specified in the helicopter flight manual taking into account the factors specified in these regulations.
	(4)In no case shall the mass at the start of take-off, or at the expected time of landing at the destination and at any alternate, exceed the relevant maximum mass at which compliance has been demonstrated with the applicable in Civil Aviation (Environment Protection - Aircraft Noise) regulations unless otherwise authorized in exceptional circumstances for a certain operating site where there is no noise disturbance problem, by the competent authority of the State in which the operating site is situated.
	(5)In developing a code of performance, the Authority shall either apply a risk assessment methodology.
Take-off and	51. (1)***Operations in performance Class1***: The helicopter shall be able, in the event

initial climb phase	of the failure of the critical engine being recognized at or before the take-off decision point, to discontinue the take-off and stop within the rejected take-off area available or, in the event of the failure of the critical engine being recognized at or after the take-off decision point, to continue the take-off, clearing all obstacles along the flight path by an adequate margin until the helicopter is in a position to comply with these regulations.
	(2)**Operations in performance Class 2**: The helicopter shall be able, in the event of the failure of the critical engine at any time after reaching DPATO, to continue the take-off, clearing all obstacles along the flight path by an adequate margin until the helicopter is in a position to comply with these regulations.
	(3) Before the DPATO, failure of the critical engine may cause the helicopter to force-land; therefore the conditions stated in these regulations shall apply
	(4)**Operations in performance Class 3**: At any point of the flight path, failure of an engine will cause the helicopter to force-land; therefore the conditions stated in these regulations shall apply.
En-route phase	52. (1)**Operations in performance Classes 1 and 2**: The helicopter shall be able, in the event of the failure of the critical engine at any point in the en-route phase, to continue the flight to a site at which the conditions for operations in performance Class 1, or Class 2 can be met, without flying below the appropriate minimum flight altitude at any point.
	(2)When the en-route phase is conducted over a hostile environment and the diversion time to an alternate exceeds two hours, the Authority shall assess the risks associated with a second engine failure.
	(3)Operations in performance Class 3: The helicopter shall be able, with all engines operating, to continue along its intended route or planned diversions without flying at any point below the appropriate minimum flight altitude.
	(4)At any point of the flight path, failure of an engine will cause the helicopter to force-land; therefore the conditions stated in these regulations shall apply.
Approach and landing phase	53. (1)Operations in performance Class 1: In the event of the failure of the critical engine being recognized at any point during the approach and landing phase, before the landing decision point, the helicopter shall, at the destination and at any alternate, after clearing all obstacles in the approach path, be able to land and stop within the landing distance available or to perform a balked landing and clear all obstacles in the flight path by an adequate margin equivalent to that specified in these regulations.
	(2)In case of the failure occurring after the landing decision point, the helicopter shall be able to land and stop within the landing distance available.

	(3)Operations in performance Class 2: In the event of the failure of the critical engine before the DPBL, the helicopter shall, at the destination and at any alternate, after clearing all obstacles in the approach path, be able either to land and stop within the landing distance available or to perform a balked landing and clear all obstacles in the flight path by an adequate margin equivalent to that specified in these regulations.
	(4)After the DPBL, failure of an engine may cause the helicopter to force-land; therefore the conditions stated in these regulation shall apply.
	(5)Operations in performance Class 3: At any point of the flight path, failure of an engine will cause the helicopter to force-land; therefore the conditions stated in these regulation shall apply.
Obstacle data	54. The operator shall use available obstacle data to develop procedures to comply with the take-off, initial climb, approach and landing phases detailed in the code of performance established by the Authority.
Additional requirements for operations of helicopters in performance class 3 in IMC, except special VFR flights	55. **(1)Operations in performance Class 3:** in IMC shall be conducted only over a surface environment acceptable to the competent authority of the State over which the operations are performed.
	(2)In approving operations by helicopters operating in performance Class 3 in IMC, the Authority shall ensure that the helicopter is certificated for flight under IFR and that the overall level of safety intended by the provisions of these regulations and Civil Aviation (Airworthiness) regulations is provided by: (a)the reliability of the engines; (b)the operator's maintenance procedures, operating practices and crew training programmes; an (c)equipment and other requirements provided in accordance with the First Schedule.
	(3)Operators of helicopters operating in performance Class 3 in IMC shall have a programme for engine trend monitoring and shall utilize the engine and helicopter manufacturers' recommended instruments, systems and operational/ maintenance procedures to monitor the engines.
	(4)In order to minimize the occurrence of mechanical failures, helicopters operating in IMC in performance Class 3 should utilize vibration health monitoring for the tail-rotor drive system.
Electronic data	56. (1)The operator shall not employ electronic navigation data products that have

management	been processed for application in the air and on the ground, unless the Authority has approved the operator's procedures for ensuring that the process applied and the products delivered have met acceptable standards of integrity and that the products are compatible with the intended function of the existing equipment.
	(2)The Operator shall continue to monitor both the process and products.
	(3)The operator shall implement procedures that ensure the timely distribution and insertion of current and unaltered electronic navigation data to all necessary helicopter.
PART VII - HELICOPTER CONTINUING AIRWORTHINESS	
	For the purpose of PartVII"helicopter" includes: engines, power transmissions, rotors, components, accessories, instruments, equipment and apparatus including emergency equipment.
Operator's Continuing Airworthiness Responsibilities.	57. (1) Subject procedures acceptable to the Authority ,Operators shall ensure that: a) each helicopter they operate is maintained in an airworthy condition; b) the operational and emergency equipment necessary for the intended flight is serviceable; and c) the certificate of airworthiness of the helicopter they operate remains valid.
	(2) [Until 4 November 2020], the operator shall not operate a helicopter unless it is maintained and released to service by an organization approved in accordance with the Civil Aviation (Aircraft Maintenance Organization) Regulations, or under an equivalent system, either of which shall be acceptable to the Authority .
	(3) [As of 5 November 2020], the operator shall not operate a helicopter unless maintenance on the helicopter, including any associated engine, rotor and part, is carried out by: a) an organization complying with the Civil Aviation (Aircraft Maintenance Organization) Regulations that is either approved by the Authority of the helicopter or is approved by another Contracting State and is accepted by the Authority b) aqualified person or organization in accordance with procedures that are authorized by the Authority; and there is a maintenance release in relation to the maintenance carried out.
	(4) [Until 4 November 2020], when the Authority accepts an equivalent system, the person signing the maintenance release shall be licensed in accordance with theCivil Aviation (Personnel Licensing) Regulations.
	(5) The operator shall employ a qualified person or group of persons to ensure that all maintenance is carried out in accordance with the maintenance control manual.
	(6) The operator shall ensure that the maintenance of its helicopters is performed in accordance with the maintenance programme approved by the Authority.
Operator's	58. (1)The operator shall provide, for the use and guidance of maintenance and

maintenance control manual	operational personnel concerned, a maintenance control manual, acceptable to the Authority in accordance with the requirements of Regulation 103,and the design of the manual shall observe Human Factors principles.
	(2) The operator shall ensure that the maintenance control manual is amended as necessary to keep the information contained therein up to date.
	(3) Copies of all amendments to the operator's maintenance control manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.
	(4) The operator shall provide the Authority and the State of Registry with a copy of the operator's maintenance control manual, together with all amendments or revisions to it and shall incorporate in it such mandatory material as the Authority or the State of Registry may require.
Maintenance programme	59. (1)The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance programme, approved by the Authority containing the information required under Regulation 104
	(2) The design and application of the operator's maintenance programme shall observe Human Factors principles.
	(3) Copies of all amendments to the maintenance programme shall be furnished promptly to all organizations or persons to whom the maintenance programme has been issued.
Continuing Airworthiness Records	60. (1) The operator shall ensure that the following records are kept for the periods specified in these regulations: a) the total time in service (hours, calendar time and cycles, as appropriate) of the helicopter and all life-limited components; b) the current status of compliance with all mandatory continuing airworthiness information; c) appropriate details of modifications and repairs to the helicopter and its major components; d) the time in service (hours, calendar time and cycles, as appropriate) since last overhaul of the helicopter or its components subject to a mandatory overhaul life; e) the current status of the helicopter's compliance with the maintenance programme; and f) the detailed maintenance records to show that all requirements for a maintenance release have been met.
	(2) The records in Paragraph (a) to (e) of Sub regulation (1) shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records inSub Regulation (1)(f) for a minimum period of one year after the signing of the maintenance release.
	(3) In the event of a temporary change of operator, the records shall be made available to the new operator, and in the event of any permanent change of operator, the records shall be transferred to the new operator.
	(4) [As of 5 November 2020], records kept and transferred in accordance with this Regulationshall be maintained in a form and format that ensures readability, security and integrity of the records at all times.

Continuing airworthiness information	61. (1)The operator of a helicopter over 3 175 kg maximum mass shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide the information as prescribed by the State of Registry and report through the system specified for airworthiness requirements.
	(2) The operator of a helicopter over 3 175 kg maximum mass shall obtain and assess continuing airworthiness information and recommendations available from the organization responsible for the type design and shall implement resulting actions considered necessary in accordance with a procedure acceptable to the State of Registry.
Modifications and repairs	62. (1) All modifications and repairs shall comply with airworthiness requirements acceptable to the Authority.
	(2) Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.
Maintenance release	63. (1) [Until 4 November 2020], a maintenance release shall be completed and signed to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and the procedures described in the maintenance organization's procedures manual.
	(2) [As of 5 November 2020], when maintenance is carried out by an approved maintenance organization, the maintenance release shall be issued by the approved maintenance organization in accordance with the provisions of the airworthiness regulations.
	(3) [Until 4 November 2020], a maintenance release shall contain a certification including: a) basic details of the maintenance carried out including detailed reference of the approved data used; b) the date such maintenance was completed; c) when applicable, the identity of the approved maintenance organization; and d) the identity of the qualified person or persons signing the release.
	(4) [As of 5 November 2020], when maintenance is not carried out by an approved maintenance organization, the maintenance release shall be completed and signed by a person appropriately licensed in accordance with Civil aviation (Personnel licensing) Regulations to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and the procedures acceptable to the Authority.
	(5) [As of 5 November 2020], when maintenance is not carried out by an approved maintenance organization, the maintenance release shall include the following: a) basic details of the maintenance carried out including detailed reference of the approved data used; b) the date such maintenance was completed; and c) the identity of the qualified person or persons signing the release.
Records	64. (1) The operator shall ensure that the following records are kept: a) in respect of the entire helicopter: the total time in service;

	b) in respect of the major components of the helicopter: i) the total time in service; ii) the date of the last overhaul; iii) the date of the last inspection; c) in respect of those instruments and equipment, the serviceability and operating life of which are determined by their time in service: i) such records of the time in service as are necessary to determine their serviceability or to compute their operating life; ii) the date of the last inspection.
	(2) These records shall be kept for a period of 90 days after the end of the operating life of the unit to which they refer.
PART VIII – HELICOPTER FLIGHT CREW	
Composition of the flight crew	65. (1) The number and composition of the flight crew shall not be less than that specified in the operations manual.
	(2) The flight crews shall include flight crew members in addition to the minimum numbers specified in the flight manual or other documents associated with the certificate of airworthiness, when necessitated by considerations related to the type of helicopter used, the type of operation involved and the duration of flight between points where flight crews are changed.
	(3) The flight crew shall include at least one member authorized by the State of Registry to operate the type of radio transmitting equipment to be used.
Flight Crew Member Emergency Duties	66. (1) The operator shall, for each type of helicopter, assign to all flight crew members the necessary functions they are to perform in an emergency or in a situation requiring emergency evacuation.
	(2) In accomplishing thefunctions specified in sub regulation (1), annual training shall be contained in the operator's training programme and shall include instruction in the use of all emergency and life-saving equipment required to be carried, and drills in the emergency evacuation of the helicopter.
Flight Crew Member Training Programmes	67. (1) The operator shall establish and maintain a ground and flight training programme, approved by the Authority, which ensures that all flight crew members are adequately trained to perform their assigned duties.
	(2)The training programme referred to in sub regulation (1) shall: (a) include ground and flight training facilities and properly qualified instructors as determined by the Authority; (b) consist of ground and flight training for the type of helicopter on

	which the flight crew member serves; (c) include proper flight crew coordination and training for all types of emergency and abnormal situations or procedures caused by engine, transmission, rotor, airframe or systems malfunctions, fire or other abnormalities; (d) include training in knowledge and skills related to the visual and instrument flight procedures for the intended area of operation, human performance and threat error and management, the transport of dangerous goods and, where applicable, procedures specific to the environment in which the helicopter is to be operated; (e) ensure that all flight crew members know the functions for which they are responsible and the relation of these functions to the functions of other crew members, particularly in regard to abnormal or emergency procedures; (f) include training in knowledge and skills related to the operational use of head-up display or enhanced vision systems for those helicopters so equipped; and (g) undertaken on a recurrent basis, as determined by the Authority, and shall include an assessment of competence.
	(3)The requirement for recurrent flight training in a particular type of helicopter shall be considered fulfilled by: (a) the use, to the extent deemed feasible by the Authority, of flight simulation training devices approved by the Authority for that purpose; or (b) the completion within the appropriate period of the proficiency check required under regulation 71 in that type of helicopter.
General qualifications	68. The operator shall comply with the Civil Aviation (Personnel Licensing) Regulations in assigning a pilot-in-command or a co-pilot to operate at the flight controls of a type or variant of a type of a helicopter during flight.
Recent Experience for pilot-in-command and co-pilot	69 (1) The operator shall not assign a pilot-in-command or a co-pilot to operate at the flight controls of a type or variant of a type of a helicopter during take-off and landing unless that pilot has operated the flight controls during at least three take-offs and landings within the preceding 90 days on the same type of helicopter or in a flight simulator approved for the purpose.
	(2)Where a pilot-in-command or a co-pilot is flying several variants of the same type of helicopter or different types of helicopter with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide under which conditions the requirements of sub-regulation (1) for each variant or each type of helicopter can be combined.
Pilot-in-Command Operational	70 (1)The operator shall not utilize a pilot as pilot-in-command of a helicopter on an operation for which that pilot is not currently qualified until such pilot has

Qualifications	complied with sub-regulations (2) and (3).
	(2)Each pilot referred to in sub regulation (1) shall demonstrate to the operator an adequate knowledge of: (a) the operation to be flown, including knowledge of: (i) the terrain and minimum safe altitudes; (ii) the seasonal meteorological conditions; (iii) the meteorological, communication and air traffic facilities, services and procedures; (iv)the search and rescue procedures; and (v) the navigation facilities and procedures associated with the route or area in which the flight is to take place; and (b) procedures applicable to flight paths over heavily populated areas and areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, and applicable operating minima; (c) the portion of the demonstration relating to arrival, departure, holding and instrument approach procedures may be accomplished in an appropriate training device which is adequate for this purpose.
	(3)A pilot-in-command shall have made a flight, representative of the operation with which the pilot is to be engaged which must include a landing at a representative heliport, as a member of the flight crew and accompanied by a pilot who is qualified for the operation.
	(4)The operator shall maintain a record, sufficient to satisfy the Authority of the qualification of the pilot and of the manner in which such qualification has been achieved.
	(5)The operator shall not continue to utilize a pilot as a pilot-in-command on an operation in an area specified by the operator and approved by the Authority unless, within the preceding 12 months, the pilot has made at least one representative flight as a pilot member of the flight crew, or as a check pilot, or as an observer on the flight deck.
	(6)In the event that more than 12 months elapse in which a pilot has not made such a representative flight, prior to again serving as a pilot-in-command on that operation, that pilot shall requalify in accordance with sub-regulations (2) and (3).
Pilot Proficiency Checks	71 (1) The operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence on each type or variant of a type of helicopter.
	(2)Where the operation may be conducted under IFR, the operator shall ensure that the pilot's competence to comply with such rules is demonstrated to either a check pilot of the operator or to a representative of the Authority.
	(3)pilot proficiency checks shall be performed twice within any period of one year, and two such checks which are similar and which occur within a period of

	four consecutive months shall not alone satisfy this requirement.
	(4)Flight simulation training devices approved by the Authority may be used for those parts of the checks for which they are specifically approved.
	(5)Where the operator schedules flight crew on several variants of the same type of helicopter or different types of helicopters with similar characteristics in terms of operating procedures, systems and handling, the Authority shall determine under which conditions the requirements of this regulation for each variant or each type of helicopter can be combined.
Flight crew equipment	72 Flight crew member assessed as fit to exercise the privileges of a licence, subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.
PART IX FLIGHT OPERATIONS OFFICER[FLIGHT DISPATCHER]	
Qualification and training	73 (1) An operator engaging a flight operations officer[flight dispatcher], employed in conjunction with an approved method of control and supervision of flight operations shall be licensedflight operations officer[flight dispatcher] in accordance with the Civil Aviation (Personnel Licensing) Regulations.
	(2) In accepting proof of qualifications other than the option of holding of a flight operations officer[flight dispatcher] licence, the Authority, in accordance with the approved method of control and supervision of flight operations, shall require that, as a minimum, such persons meet the requirements specified in Civil Aviation (Personnel Licensing) Regulations for the flight operations officer[flight dispatcher] licence.
	(3) A flight operations officer[flight dispatcher] shall not be assigned to duty unless that person has: (a) satisfactorily completed the operator-specific training course that addresses all the specific components of its approved method of control and supervision of flight operations as specified in regulation 10; (b) made, within the preceding 12 months, at least two qualification flights in a helicopter over any area for which that person is authorized to exercise flight supervision. The flight shall include landings at as many heliports as practicable; (c) demonstrated to the operator a knowledge of: (i) the contents of the operations manual; (ii) the radio equipment in the helicopters used; and (iii) the navigation equipment in the helicopters used; (d) demonstrated to the operator a knowledge of the following details concerning operations for which the officer is responsible and areas in which that individual is authorized to exercise flight supervision: (i) the seasonal meteorological conditions and the sources of meteorological information;

	(ii) the effects of meteorological conditions on radio reception in the helicopters used; (iii) the peculiarities and limitations of each navigation system which is used by the operation; and (iv) the helicopter loading instructions; (e) demonstrated to the operator as to knowledge and skills related to human performance as they apply to dispatch duties; and (f) demonstrated to the operator the ability to perform the flight operations/flight dispatcher duties specified in regulation 45.
	(4)A flight operations officer[flight dispatcher] assigned to duty shall maintain complete familiarization with all features of the operations which are pertinent to such duties, including knowledge and skills related to human performance.
	(5)A flight operations officer[flight dispatcher] shall not be assigned to duty after 12 consecutive months of absence from such duty, except in accordance with the sub-regulation (3) are met.
PART X MANUALS, LOGS AND RECORDS	
Flight manual	74 (1) An operator shall ensure that a flight manual contains the information specified in the Civil Aviation (Airworthiness) Regulations.
	(2) The flight manual shall be updated by implementing changes made mandatory by the Authority.
Operator's maintenance control manual	75 The operator's maintenance control manual, which may be issued in separate parts, shall contain the following information: (a) a description of the procedures including, when applicable: (i) a description of the administrative arrangements between the operator and the approved maintenance organization; (ii) a description of the maintenance procedures and the procedures for completing and signing a maintenance release when maintenance is based on a system other than that of an approved maintenance organization; (b) names and duties of the qualified person or persons required under regulation 57(5); (c) a reference to the maintenance programme required under regulation 59; (d) a description of the methods used for the completion and retention of the operator's maintenance records required under regulation 60; (e) a description of the procedures for monitoring, assessing and reporting maintenance and operational experience required under regulation 61; (f) a description of the procedures for complying with the service information reporting requirements for airworthiness; (g) a description of procedures for assessing continuing airworthiness information and implementing any resulting actions, as required under regulation 61;

	(h) a description of the procedures for implementing action resulting from mandatory continuing airworthiness information; (i) a description of establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme, in order to correct any deficiency in that programme; (j) a description of helicopter types and models to which the manual applies; (k) a description of procedures for ensuring that unserviceabilities affecting airworthiness are recorded and rectified; (l) a description of the procedures for advising the Authority of significant in-service occurrences; (m) a description of procedures to control the leasing of aircraft and related aeronautical products; and (n) a description of the maintenance control manual amendment procedures.
Maintenance programme	76 (1) A maintenance programme for each helicopter as required by regulation 59 shall contain the following information: (a) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the helicopter; (b) where applicable, a continuing structural integrity programme; (c) procedures for changing or deviating from paragraphs (a) and (b); and (d) when applicable, condition monitoring and reliability programme descriptions for helicopter systems, components, power transmissions, rotors and engines.
	(2) Maintenance tasks and intervals that have been specified as mandatory in approval of the type design shall be identified as such by the Operator.
	(3) The maintenance programme shall be based on maintenance programme information made available by the State of Design or by the organization responsible for the type design, and any additional applicable experience.
Journey logbook	77 (1) A helicopter journey log book shall contain the following items and the corresponding roman numerals: I — Helicopter nationality and registration. II — Date. III — Names of crew members. IV — Duty assignments of crew members. V — Place of departure. VI — Place of arrival. VII — Time of departure. VIII — Time of arrival. IX — Hours of flight. X — Nature of flight (private, scheduled or non-scheduled). XI — Incidents, observations, if any. XII — Signature of person in charge.
	(2) Entries in the journey log book shall be made current and in ink or indelible

		pencil.
		(3)Completed journey log books shall be retained to provide a continuous record of the last [six] months' operations.
Records of emergency and survival equipment carried	78	(1) Operators shall at all times have available for immediate communication to rescue coordination centres, lists containing information on the emergency and survival equipment carried on board any of their helicopters engaged in air navigation.
		(2)The information shall include, as applicable, the number, colour and type of life rafts and pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of the emergency portable radio equipment.
Flight recorder records	79	The operator shall ensure, to the extent possible, in the event the helicopter becomes involved in an accident or incident, the preservation of all related flight recorder records, and if necessary the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with Civil Aviation (Aircraft Accident and Incident Investigation) Regulations.
		PART XI – CABIN CREW
Assignment of emergency duties	80	(1) The operator shall establish, to the satisfaction of the Authority, the minimum number of cabin crew required for each type of helicopter, based on seating capacity or the number of passengers carried, which shall not be less than the minimum number established during certification, in order to effect a safe and expeditious evacuation of the helicopter, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation.
		(2)The operator shall assign the functions refered to in sub regulation (1) for each type of helicopter.
Protection of cabin crew during flight	**81**	Each cabin crew member shall be seated with seat belt or, when provided, safety harness fastened during take-off and landing and whenever the pilot-in-command so directs.
Training	82	(1) The operator shall establish and maintain a training programme, approved by the Authority, to be completed by all persons before being assigned as a cabin crew member.
		(2) Cabin crew members shall complete a recurrent training programme annually.
		(3)The training programmes established in terms of sub regulation (1) shall ensure that each person is: (a) competent to execute those safety duties and functions that the cabin attendant is assigned to perform in the event of an emergency or in a

	situation requiring emergency evacuation; (b) drilled and capable in the use of emergency and life-saving equipment required to be carried, such as life jackets, life rafts, evacuation slides, emergency exits, portable fire extinguishers, oxygen equipment, first-aid and universal precaution kits, and automated external defibrillators; (c) when serving on helicopters operated above 3000 m (10 000 ft), knowledgeable as regards the effect of lack of oxygen and, in the case of pressurized helicopters, as regards physiological phenomena accompanying a loss of pressurization; (d) aware of other crew members' assignments and functions in the event of an emergency so far as is necessary for the fulfilment of the cabin crew member's own duties; (e) aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin; and (f) knowledgeable about human performance as related to passenger cabin safety duties including flight crew-cabin crew coordination.
	PART XII - SECURITY
Helicopter Search Procedure Checklist	83 (1) An operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage.
	(2)The checklist established pursuant to sub regulation (1) shall be supported by guidance on the course of action to be taken should a bomb or suspicious object be found.
Training Programmes	84 (1) The operator shall establish and maintain a training programme which enables crew members to act in the most appropriate manner to minimize the consequences of acts of unlawful interference.
	(2) The operator shall also establish and maintain a training programme to acquaint appropriate employees with preventive measures and techniques in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on a helicopter so that they contribute to the prevention of acts of sabotage or other forms of unlawful interference.
	(3) As a minimum, approved security training programme shall include the following elements: (a) determination of the seriousness of any occurrence (b) crew communication and coordination; (c) appropriate self-defense responses (d) use of non-lethal protective devices assigned to crew members whose use is authorized by the Authority; (e) understanding of behaviour of terrorists so as to facilitate the ability of crew members to cope with hijacker behaviour and passenger responses; (f) live situational training exercises regarding various threat conditions;

	(g) flight crew compartment procedures to protect the aeroplane; and aeroplane search procedures and guidance on least-risk bomb locations where practicable.
Reporting Acts of Unlawful Interference	85 Following an act of unlawful interference, the pilot-in-command shall submit, without delay, a report of such an act to the designated local authority.

PART XIII
GENERAL AVIATION

Compliance with laws regulations and procedures	**86** (1) The pilot-in-command shall comply with the relevant laws, regulations and procedures of the States in which the helicopter is operated.
	(2)The pilot-in-command shall be responsible for the operation and safety of the helicopter and for the safety of all crew members, passengers and cargo on board, from the moment the engineare started until the helicopter finally comes to rest at the end of the flight, with the engineshut down and the rotor blades stopped.
	(3)Where an emergency situation which endangers the safety of the helicopter or persons necessitates the taking of action which involves a violation of local regulations or procedures, the pilot-in-command shall notify the appropriate local authority without delay.
	(4) Where required by the State in which the incident occurs, the pilot-in-command shall submit a report on any such violation to the appropriate authority of such State; in that event, the pilot-in-command shall also submit a copy of it to the Authority and such reports shall be submitted within ten days.
	)
	(5)The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the helicopter, resulting in serious injury or death of any person or substantial damage to the helicopter or property.
	(6)The pilot-in-command shall have available on board the helicopter essential information concerning the search and rescue services in the areas over which it is intended the helicopter will be flown.
	(7) Operators shall ensure that an aeroplane- (a) has equipments and instruments; (b) has communication, navigation and surveillance equipment, in the manner provided in the Civil Aviation (Instrument and Equipments) Regulations.

Dangerous Goods	**87**	The pilot-in-command of a helicopter to which this Part applies shall not carry dangerous goods in the helicopter unless in accordance with the Technical Instructions for the Safe Transport of Dangerous Goods by Air as approved and published by decision of the Council of the International Civil Aviation Organisation for the time being in force.
Use of psychoactive substances.	88	The use of psychoactive substances shall be governed under the Civil Aviation (Personnel Licensing) Regulations and Civil Aviation(Rule of the Air) Regulations.
Specific approvals	89	(1) The pilot- in-command shall not conduct operations for which a specific approval is required unless such approval has been issued by the Authority.
		(2)Specific approvals shall follow the layout and contain at least the information listed in the Third Schedule to the Civil Aviation (Operation of Air Craft- General Aviation) Regulations.
PART XIV FLIGHT OPERATIONS		
Adequacy of operating Facilities	90	The pilot-in-command shall not commence a flight unless it has been ascertained by every reasonable means available that the ground or water facilities available and directly required for such flight and for the safe operation of the helicopter are adequate including communication facilities and navigation aids.
Heliport or landing location operating minima	91	(1) The pilot-in-command shall establish operating minima in accordance with criteria specified by the Authority for each heliport or landing location to be used in operations.
		(2) Subject to sub-regulation (1), the operating minima shall not be lower than any that may be established by the State of the Aerodrome, except when specifically approved by that State.
		(3)The Authority may approve operational credit for operations with helicopters equipped with automatic landing systems, a HUD or equivalent displays, EVS, SVS or CVS.
		(4)Subject to sub-regulation (3), such approvals shall not affect the classification of the instrument approach procedure.
		(5)For the purpose of these regulations, operational credit includes : (a) for the purposes of an approach ban, a minima below the heliport or landing location operating minima; (b) reducing or satisfying the visibility requirements; or (c) requiring fewer ground facilities as compensated for by airborne capabilities.
Passenger briefing	92	(1) The pilot-in-command shall ensure that crew members and passengers are

	made familiar, by means of an oral briefing or by other means, with the location and the use of: (a)seat belts or harnesses; and, as appropriate, (b)emergency exits; (c)life jackets; (d)oxygen dispensing equipment; an (e)other emergency equipment provided for individual use, including passenger emergency briefing cards.
	(2)The pilot-in-command shall ensure that all persons on board are aware of the location and general manner of use of the principal emergency equipment carried for collective use.
Helicopter Airworthiness and Safety Precaution	93 A flight shall not be commenced until the pilot-in-command is satisfied that: (a) the helicopter is airworthy ,duly registered and that the appropriate certificates with respect thereto are aboard the helicopter; (b) the instruments and equipment installed in the helicopter are appropriate, taking into account the expected flight conditions; (c) any necessary maintenance has been performed in accordance with sub part (f) of Part II to these Regulations; (d) The mass of the helicopter and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected; (e) any load carried is properly distributed and safely secured; and (f) the helicopter operating limitations contained in the flight manual, or its equivalent, will not be exceeded.
Weather Reports and Forecasts	94 (1)Before commencing a flight, the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight.
	(2)Preparation for a flight away from the vicinity of the place of departure, and for every flight under IFR, shall include: (a) a study of available current weather reports and forecasts; and (b) 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.
Limitations imposed by	95 A flight, except one of purely local character in visual meteorological conditions, to be conducted in accordance with VFR shall not be commenced unless current

weather conditions – VFR Flight		meteorological reports, or a combination of current reports and forecasts, indicate that the meteorological conditions along the route, or that part of the route to be flown under VFR, will, at the appropriate time, be such as to enable compliance with the VFR.
Limitations imposed by weather conditions – IFR Flight	96	***(1)*** A flight to be conducted in accordance with IFR shall not be commenced unless the available information indicates that conditions, at the heliport of intended landing and at least one alternate heliport will, at the estimated time of arrival, be at or above the heliport operating minima. ***(2)*** A flight to be conducted in accordance with IFR to a heliport when no alternate heliport is required shall not be commenced unless available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two hours after the estimated time of arrival, or from the actual time of departure to two hours after the estimated time of arrival, whichever is the shorter period: (a) a cloud base of at least 120 m (400 ft) above the minimum associated with the instrument approach procedure; and (b) visibility of at least 1.5 km more than the minimum associated with the procedure
Heliport operating minima	97	(1)A flight shall not be continued towards the heliport of intended landing unless the latest available meteorological information indicates that conditions at that heliport, or at least one alternate heliport, will, at the estimated time of arrival, be at or above the specified heliport operating minima.
		(2)An instrument approach shall not be continued below 300 m (1 000 ft) above the heliport elevation or into the final approach segment unless the reported visibility or controlling RVR is at or above the heliport operating minima.
		(3)If, after entering the final approach segment or after descending below 300 m (1 000 ft) above the heliport elevation, the reported visibility or controlling RVR falls below the specified minimum, the approach may be continued to DA/H or MDA/H.
		(4)Subject to sub-regulation(3), a helicopter shall not continue its approach-to-land beyond a point at which the limits of the heliport operating minima would be infringed
Flight in icing conditions	98	A flight to be operated in known or expected icing conditions shall not be commenced unless the helicopter is certificated and equipped to cope with such conditions.
Alternate Heliportss	**99**	(1)For a flight to be conducted in accordance with IFR, at least one alternate heliport or landing location shall be specified in the operational flight plan and

	the flight plan, unless: (a) the weather conditions in regulation 96(2) prevail;or (b) the heliport or landing location of intended landing is isolated and: (i) no alternate heliport or landing location is available; (ii) an instrument approach procedure is prescribed for the isolated heliport of intended landing; (iii) a point of no return (PNR) is determined in case of an offshore destination.
	(2)Suitable offshore alternates may be specified subject to the following: (a) the offshore alternates shall be used only after passing a PNR, and prior to a PNR, onshore alternates shall be used; (b) mechanical reliability of critical control systems and critical components shall be considered and taken into account when determining the suitability of the alternate; (c) one engine inoperative performance capability shall be attainable prior to arrival at the alternate; (d) to the extent possible, deck availability shall be guaranteed; and (e) weather information must be reliable and accurate.
	(3)Offshore alternates shall not be used when it is possible to carry enough fuel to have an onshore alternate, and shall not be used in a hostile environment.
Fuel and Oil requirements	**100** (1) A flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the helicopter carries sufficient fuel and oil to ensure that it can safely complete the flight.
	(2)subject to sub-regulation (1), reserve fuel and oil shall be carried to provide for contingencies
	(3)The fuel and oil carried in order to comply with sub-regulation (1) shall, in the case of VFR operations, be at least the amount to allow the helicopter to: a)fly to the landing site to which the flight is planned; b)have a final reserve fuel to fly thereafter for a period of 20 minutes at best-range speed; and c)have an additional amount of fuel to provide for the increased consumption on the occurrence of potential contingencies, as determined by the Authority.
	(4) The fuel and oil carried in order to comply with sub-regulation(1) shall, in the case of IFR operations, be at least the amount to allow the helicopter: a)Where no alternate is required, in accordance with regulation 96(2), to fly to and execute an approach at the heliport or landing location to which

	the flight is planned, and thereafter to have: (i) a final reserve fuel to fly 30 minutes at holding speed at 450 m (1 500 ft) above the destination heliport or landing location under standard temperature conditions and approach and land; and (ii) an additional amount of fuel to provide for the increased consumption on the occurrence of potential contingencies. b)Where an alternate is required, in terms of regulations 96(1), to fly to and execute an approach, and a missed approach, at the heliport or landing location to which the flight is planned, and thereafter: (i) fly to and execute an approach at the alternate specified in the flight plan; and then (ii) have a final reserve fuel to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate under standard temperature conditions, and approach and land; and (iii) have an additional amount of fuel to provide for the increased consumption on the occurrence of potential contingencies. c)Where no alternate heliport or landing location is available, including the heliport of intended landing is isolated and no alternate is available, to fly to the heliport to which the flight is planned and thereafter for a period as specified by the Authority.
	(5)In computing the fuel and oil required in sub-regulations(1), at least the following shall be considered; a)meteorological conditions forecast; b)expected air traffic control routings and traffic delays; c)for IFR flight, one instrument approach at the destination heliport, including a missed approach; d)the procedures for loss of pressurization, where applicable, or failure of one engine while en route; and e)any other conditions that may delay the landing of the helicopter or increase fuel and/or oil consumption.
	(6)The use of fuel after flight commencement for purposes other than originally intended during pre-flight planning shall require a re-analysis and, if applicable, adjustment of the planned operation.
In Flight Fuel Management.	**101** (1)The pilot-in-command shall monitor the amount of usable fuel remaining on board to ensure it is not less than the fuel required to proceed to a landing site where a safe landing can be made with the planned final reserve fuel remaining.

	(2)The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific landing site, the pilot calculates that any change to the existing clearance to that landing site, or other air traffic delays, may result in landing with less than the planned final reserve fuel.
	(3)The pilot-in-command shall declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL, when the usable fuel estimated to be available upon landing at the nearest landing site where a safe landing can be made is less than the required final reserve fuel in compliance with regulation 100.
Oxygen supply	**102** (1)Approximate altitudes in the Standard Atmosphere corresponding to the values of absolute pressure used in the text are as follows:
	be operated at altitudes at which the atmospheric pressure in personnel compartments will be less than 700 hPa shall not be commenced unless sufficient stored breathing oxygen is carried to supply: a)all crew members and 10 per cent of the passengers for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hPa and 620 hPa; b)the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa.
	(3)A flight to be operated with a pressurized helicopter shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all the crew members and a proportion of the passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressurization, for any period that the atmospheric pressure in any compartment occupied by them would be less than 700 hPa
Use of Oxygen	103 All flight crew members, when engaged in performing duties essential to the safe operation of a helicopter in flight, shall use breathing oxygen continuously whenever the circumstances prevail for which its supply has been required in regulation 102 (1) and (2).
In -Flight Emergency Instruction.	104 In an emergency during flight, the pilot-in-command shall ensure that all persons on board are instructed in such emergency action as may be appropriate to the circumstances.

Absolute pressure	Metres	Feet
700 hPa	3 000	10 000
620 hPa	4 000	13 000

Weather Reporting by Pilots.	105 Where weather conditions likely to affect the safety of other aircraft are encountered, they shall be reported as soon as possible.
Hazardous Flight Conditions	106 Hazardous flight conditions, other than those associated with meteorological conditions, encountered en route shall be reported as soon as possible and the reports so rendered shall give such details as may be pertinent to the safety of other aircraft.
Fitness of Flight Crew Members	**107** The pilot-in-command shall be responsible for ensuring that a flight: a)shall not be commenced if any flight crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, the effects of alcohol or drugs; and b)shall not be continued beyond the nearest suitable heliport when flight crew members' capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness, lack of oxygen.
Flight Crew Members at Duty Stations.	108 (1) All flight crew members required to be on flight deck duty shall be at their stations during take off and landing.
	(2) During enroute phase of a flight, all flight crew members required to be on flight deck duty shall remain at their stations except when their absence is necessary for the performance of duties in connection with the operation of the helicopter, or for physiological needs.
	(3) All flight crew members shall keep their seat belt fastened when at their stations.
	(4)Where safety harnesses are provided, any flight crew member occupying a pilot's seat shall keep the safety harness fastened during the take-off and landing phases;
	(5) Subject to sub-regulation (4), all other flight crew members shall keep their safety harness fastened during the take-off and landing phases unless the shoulder straps interfere with the performance of their duties, in which case the shoulder straps may be unfastened but the seat belt must remain fastened.
Instrument Flight Procedures.	**109** (1) One or more instrument approach procedures designed to support instrument approach operations shall be approved and promulgated by the State in which the heliport is located, or by the State which is responsible for the

	heliport when located outside the territory of any State, to serve each final approach and take-off area or heliport utilized for instrument flight operations.
	(2)All helicopters operated in accordance with IFR shall comply with the instrument approach procedures approved by the State in which the heliport is located, or by the Authority which is responsible for the heliport when located outside the territory of any State.
Instruction — General	110 A helicopter rotor shall not be turned under power for the purpose of flight without a qualified pilot at the controls.
Refuelling with passengers on board or Rotors Turning.	**111** (1) A helicopter shall not be refuelled when passengers are embarking, on board or disembarking or when the rotor is turning unless it is attended by the pilot-in-command or other qualified personnel ready to initiate and direct an evacuation of the helicopter by the most practical and expeditious means available.
	(2)When refuelling with passengers embarking, on board or disembarking, two-way communications shall be maintained by helicopter inter-communications system or other suitable means between the ground crew supervising the refuelling and the pilot-in-command or other qualified personnel required by the sub-regulation (1).
Over water-flights.	112 All helicopters on flights over water in a hostile environment in accordance with Regulation 140 shall be certificated for ditching and sea state shall be an integral part of ditching information.
PART XV - HELICOPTER PERFORMANCE OPERATING LIMITATIONS	
Operating limitations	113 (1) A helicopter shall be operated: a)in compliance with the terms of its airworthiness certificate or equivalent document; b)within the operating limitations prescribed by the Authority; and c)within the mass limitations imposed by compliance with the applicable noise [certification Standards in civil aviation (environmental protection) regulations,] unless otherwise authorized, in exceptional circumstances for a certain heliport where there is no noise disturbance problem, by the competent authority of the State in which the heliport is situated.
	(2)Placards, listings, instrument markings, or combinations thereof, containing those operating limitations prescribed by the Authority for visual presentation, shall be displayed in the helicopter.
	(3)Where helicopters are operating to or from heliports in a congested hostile

	environment, the competent authority of the State in which the heliport is situated shall take such precautions as are necessary to control the risk associated with an engine failure.
	(e) - *HELICOPTER CONTINUING AIRWORTHINESS*
Interpretation	114 For the purpose of this sub Part "helicopter" includes: engines, power transmissions, rotors, components, accessories, instruments, equipment and apparatus including emergency equipment
Operator's Continuing Airworthiness Responsibilities	115 (1) The owner of a helicopter, or in the case where it is leased, the lessee, shall ensure that: a) the helicopter is maintained in an airworthy condition; b) the operational and emergency equipment necessary for the intended flight is serviceable; c) the certificate of airworthiness of the helicopter remains valid; and d) the maintenance of the helicopter is performed in accordance with a maintenance programme acceptable to the Authority.
	(2) [Until 4 November 2020,] the helicopter shall not be operated unless it is maintained and released to service under a system acceptable to the Authority.
	(3) [As of 5 November 2020,] the owner or the lessee shall not operate the helicopter unless maintenance on the helicopter, including any associated engine, rotor and part, is carried out: a) by an organization complying with airworthiness requirements that are either approved by the State of Registry of the helicopter by another Contracting State and are accepted by the Authority; or b) by a qualified person or organization in accordance with procedures that are authorized by the State of Registry; and there is a maintenance release in relation to the maintenance carried out.
	(4) [Until 4 November 2020,] when the maintenance release is not issued by an organization approved in accordance with the Civil Aviation (Airworthiness) Regulations, the person signing the maintenance release shall be licensed in accordance with the Civil Aviation (Personnel Licensing) Regulations.
Continuing Airworthiness Records	116 (1) The owner shall ensure that the following records are kept for the periods mentioned in these regulations: a) the total time in service hours, calendar time and cycles, as appropriate of the helicopter and all life-limited components; b) the current status of compliance with all mandatory continuing airworthiness information; c) appropriate details of modifications and repairs to the helicopter; d) the time in service since last overhaul of the helicopter or its components subject to a mandatory overhaul life; e) the current status of the helicopter's compliance with the maintenance programme; and

	f) the detailed maintenance records to show that all requirements for signing of a maintenance release have been met.
	(2) The records in subregulation(1)(a) to(e) shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in subregulation (1)(f) for a minimum period of [one year] after the signing of the maintenance release.
	(3) Where a helicopter is leased, the lessee of that helicopter shall comply with the requirements of sub regulations (1) and(2), as applicable,
	(4) [As of 5 November 2020,] records kept and transferred in accordance with this regulation shall be maintained in a form and format that ensures readability, security and integrity of the records at all times.
Continuing Airworthiness Information	117 The owner of a helicopter over 3 175 kg maximum certificated take-off mass, or in the case where it is leased, the lessee, shall, as required by the State of Registry, ensure that the information resulting from maintenance and operational experience with respect to continuing airworthiness is transmitted in accordance with airworthiness requirements.
Modifications and Repairs	118 All modifications and repairs shall comply with airworthiness requirements acceptable to the Authority, and the operator shall establish procedures to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.
Maintenance Release	119 (1) [Until 4 November 2020,] a maintenance release shall be completed and signed, as prescribed by the State of Registry, to certify that the maintenance work performed has been completed satisfactorily
	(2) As of 5 November 2020, when maintenance is carried out by an approved maintenance organization, the maintenance release shall be issued by the approved maintenance organization in accordance with the provisions of the Civil Aviation (Aircraft Maintenance Organization) Regulations
	(3) [Until 4 November 2020,] a maintenance release shall contain a certification which shall include: a) basic details of the maintenance carried out; b) the date such maintenance was completed; c) when applicable, the identity of the approved maintenance organization; and d) the identity of the person or persons signing the release
	(4) [As of 5 November 2020,] when maintenance is not carried out by an approved maintenance organization, the maintenance release shall be completed and signed by a person appropriately licensed in accordance with Civil Aviation (Personnel Licensing) Regulations to certify that the maintenance work performed has been completed satisfactorily and in accordance with data and procedures acceptable to the Authority.
	(6) [As of 5 November 2020,] when maintenance is not carried out by an approved maintenance organization, the maintenance release shall include the following:

	a) basic details of the maintenance carried out; b) the date such maintenance was completed; and c) the identity of the person or persons signing the release.
PART XIX - HELICOPTER FLIGHT CREW	
Qualifications	120 The pilot-in-command shall ensure that the licences of each flight crew member have been issued or rendered valid by the Authority, and are properly rated and of current validity, and shall be satisfied that flight crew members have maintained competence.
Composition of Flight Crew.	121 The number and composition of the flight crew shall not be less than that specified in the flight manual or other documents associated with the certificate of airworthiness.

FIRST SCHEDULE

(made under regulation……..)

ADDITIONAL REQUIREMENTS FOR OPERATIONS OF HELICOPTERS IN PERFORMANCE CLASS 3 IN INSTRUMENT METEOROLOGICAL CONDITIONS (IMC)

Airworthiness and operations requirements provided in accordance with Regulation 58, shall satisfy the following**:**

1. ENGINE RELIABILITY

1.1. Attaining and maintaining approval for engines used by helicopters operating in performance
Class 3 in IMC:

1.1.1. In order to attain initial approval for existing in-service engine types, reliability shall be shown to have a nominal power loss rate of less than 1 per 100 000 engine hours based on a risk management process.

Note. — Power loss in this context is defined as any significant loss of power, the cause of which may be traced to engine or engine component, design, maintenance or installation, including design or installation of the fuel ancillary or engine control systems.

1.1.2. In order to attain initial approval for new engine types, the State of Design shall assess engine models for acceptance for operations in performance Class 3 in IMC on a case-by-case basis.

1.1.3. In order to maintain approval, the State of Design shall, through the continuing airworthiness process, ensure that engine reliability remains consistent with the intent of the standards contained is **1.1.1**.

1.2. The operator shall be responsible for a programme for ongoing engine trend monitoring.

1.3. To minimize the probability of in-flight engine failure, the engine shall be equipped with:

a) for turbine engines: a re-ignition system that activates automatically or a manually selectable continuous ignition system unless the engine certification has determined that such a system is not required, taking into consideration the likely environmental conditions in which the engine is to be operated;

b) a magnetic particle detection or equivalent system that monitors the engine, accessories gearbox, and reduction gearbox, and which includes a flight deck caution indication; and

c) a means that would permit continuing operation of the engine through a sufficient power range to safely complete the flight in the event of any reasonably probable failure of the fuel control unit.

2. SYSTEMS AND EQUIPMENT

2.1. Helicopters operating in performance Class 3 in IMC shall be equipped with the following systems and equipment intended to ensure continued safe flight or to assist in achieving a safe forced landing after an engine failure, under all allowable operating conditions:

a) either two separate electrical generating systems, each one capable of supplying all probable combinations of continuous in-flight electrical loads for instruments, equipment and systems required in IMC; or a primary electrical source and a standby battery or other alternate source of electric power that is capable of supplying 150 per cent of electrical loads of all required instruments and equipment necessary for safe emergency operations of the helicopter for at least one hour; and

b) an emergency electrical supply system of sufficient capacity and endurance, following loss of all normally generated power to, as a minimum:

Note.— If a battery is used to satisfy the requirement for a second power source (see 2.a) above), an additional electrical power supply may not be required.

i. maintain the operation of all essential flight instruments, communication and navigation systems during a descent from the maximum certificated altitude in an autorotational configuration to the completion of a landing;

ii. maintain the operation of the stabilization system, if applicable;

iii. lower the landing gear, if applicable;

iv. where required, provide power to one pitot heater, which must serve an airspeed indicator clearly visible to the pilot;

v. provide for the operation of the landing light;

vi. provide for one engine restart, if applicable; and

vii. provide for the operation of the radio altimeter;

c) a radio altimeter;

d) an autopilot if intended as a substitute for a second pilot. In these cases, the Authority shall ensure the operator's approval clearly states any conditions or limitations on its use;

e) a means to provide for at least one attempt at engine re-start;

f) an area navigation system approved for use in IFR, capable of being used to locate suitable landing areas in the event of an emergency;

g) a landing light that is independent of retractable landing gear and is capable of adequately illuminating the touchdown area in a night forced landing; and

h) an engine fire warning system.

3. MINIMUM SERVICEABILITY REQUIREMENTS — OPERATING EQUIPMENT

The Authority shall specify the minimum serviceability requirements in accordance with Civil Aviation (Instruments and Equipment) and (Airworthiness) Regulations for operating equipment in helicopters operating in performance Class 3 in IMC.

4. OPERATIONS MANUAL INFORMATION

The operations manual shall include limitations, procedures, approval status and other information relevant to operations in performance Class 3 in IMC, in accordance with Civil Aviation (Air Operator Certification and Administration) Regulation.

5. EVENT REPORTING

5.1. The operator approved to conduct operations by helicopters in performance Class 3 in IMC shall report all significant failures, malfunctions or defects to the Authority who in turn shall notify the State of Design in accordance with Civil Aviation (Airworthiness) and (Safety Management) Regulations.

5.2. The Authority shall monitor operations in performance Class 3 in IMC so as to be able to take any actions necessary to ensure that the intended safety level is maintained. The Authority shall notify major events or trends of particular concern to the appropriate type certificate holder and the State of Design.

6. OPERATOR PLANNING

6.1. Operator route planning shall take account of all relevant information in the assessment of intended routes or areas of operations, including the following:

a) the nature of the terrain to be overflown, including the potential for carrying out a safe forced landing in the event of an engine failure or major malfunction;

b) weather information, including seasonal and other adverse meteorological influences that may affect the flight; and
c) other criteria and limitations as specified by the Authority.

7. FLIGHT CREW EXPERIENCE, TRAINING AND CHECKING

7.1. The Authority shall prescribe the minimum flight crew experience for helicopters operating in performance Class 3 in IMC.

7.2. The operator's flight crew training and checking programme shall be appropriate to operations in performance Class 3 in IMC, covering normal, abnormal and emergency procedures and, in particular, detection of engine failure including descent to a forced landing in IMC and, for single engine helicopters, entry into a stabilized autorotation.

8. OPERATOR CERTIFICATION OR VALIDATION

The operator shall demonstrate the ability to conduct operations in performance Class 3 in IMC through a certification and approval process specified by the Authority in accordance with Civil Aviation (Air Operator Certificate and Administration) Regulations.

SECOND SCHEDULE