

LEGAL NOTICE NO .....

CIVIL AVIATION ACT  
(NO 354.....)

DRAFT CIVIL AVIATION (OPERATION OF AIRCRAFT – COMMERCIAL AIR TRANSPORT  
AEROPLANES) REGULATIONS, 2019

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PRELIMINARY PROVISIONS

Title	<b>1.</b> These Regulations may be cited as the Civil Aviation (Operation of Aircraft - commercial air transport aeroplanes) regulations, 2019
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<p>Interpretation</p>	<p><b>2.</b> In these Regulations, unless the context otherwise requires-</p> <p>“acts of unlawful interference” means acts or attempted acts aimed at jeopardizing the safety of civil aviation and air transport, such as:</p> <ul style="list-style-type: none"> <li>(a) unlawful seizure of aircraft in flight;</li> <li>(b) unlawful seizure of aircraft on the ground;</li> <li>(c) hostage-taking on board an aircraft or on aerodromes;</li> <li>(d) forcible intrusion on board an aircraft, at an airport or on the premises of an aeronautical facility;</li> <li>(e) introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes; and</li> <li>(f) communication of false information as to jeopardize the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public, at an airport or on the premises of a civil aviation facility;</li> </ul> <p>“advisory airspace” means an airspace of defined dimensions, or designated route, within which air traffic advisory service is available;</p> <p>“aerial work” means an aircraft operation in which an aircraft is used for specialised services including, but not limited to agriculture, construction, photography, surveying, observation and patrol, search and rescue and aerial advertisement;</p> <p><i>Accelerate-stop distance available (ASDA)</i> means the length of the take-off run available plus the length of stop way, if provided;</p> <p><i>Aerial work</i> means an aircraft operation in which an aircraft is used for specialized services including agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement;</p> <p><i>Aerodrome</i> 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;</p> <p><i>Aerodrome operating minima</i> means the limits of usability of an aerodrome for:</p> <ul style="list-style-type: none"> <li>a) take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions;</li> <li>b) 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</li> <li>c) 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.</li> </ul> <p><i>Aeroplane</i> means a power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.</p> <p><i>Aircraft</i> means any machine that can derive support in the atmosphere from the reactions of</p>
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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.

*Aircraft tracking* means a process, established by the operator that maintains and updates, at standardized intervals, a ground-based record of the four-dimensional position of individual aircraft in flight.

*Air operator certificate (AOC)* means a certificate authorizing an operator to carry out specified commercial air transport operations.

*Air traffic service (ATS)* means 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*. 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 aerodrome* means an aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome 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 aerodromes include the following:

- a) *Take-off alternate* which is an alternate aerodrome at which an aircraft would be able to land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure.
- b) *En-route alternate* which is an alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en route.
- c) *Destination alternate* which is an alternate aerodrome at which an aircraft would be able to land should it become either impossible or inadvisable to land at the aerodrome of intended landing.

*Altimetry system error (ASE)* means the difference between the altitude indicated by the altimeter display, assuming a correct altimeter barometric setting, and the pressure altitude corresponding to the undisturbed ambient pressure.

*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.

*COMAT* means an operators material carried on an operator's aircraft for the operator's own purposes.

*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.

*Continuing airworthiness* means the set of processes by which an aircraft, engine, propeller or part complies with the applicable airworthiness requirements and remains in a condition for safe operation throughout its operating life.

*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 maneuver 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.

*Cruise relief pilot* means a flight crew member who is assigned to perform pilot tasks during cruise flight, to allow the pilot-in-command or a co-pilot to obtain planned rest.

*Cruising level* means a level maintained during a significant portion of a flight.

*Dangerous goods* means an 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 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.

*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.

*EDTO critical fuel* means the fuel quantity necessary to fly to an en-route alternate aerodrome considering, at the most critical point on the route, the most limiting system failure.

*EDTO significant system* means an aeroplane system whose failure or degradation could adversely affect the safety particular to an EDTO flight, or whose continued functioning is specifically important to the safe flight and landing of an aeroplane during an EDTO diversion.

*Electronic flight bag (EFB)* means 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.

*Emergency locator transmitter (ELT)* means a generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated. An ELT may be any of the following:

*Automatic fixed ELT (ELT(AF))* means an automatically activated ELT which is permanently attached to an aircraft.

*Automatic portable ELT (ELT (AP))* means an automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft.

*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.

*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.

*Extended diversion time operations (EDTO)* means any operation by an aeroplane with two or more turbine engines where the diversion time to an en-route alternate aerodrome is greater than the threshold time established by the Authority.

*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 perform safety-related operational duties.

*Fatigue Risk Management System (FRMS)*. A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.

*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 data analysis* means a process of analyzing recorded flight data in order to improve the safety of flight operations.

*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 aeroplane finally comes to rest and the engines are shut down at the end of the last flight on which he/she 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/flight dispatcher* means a person designated by the operator to engage in the control and supervision of flight operations, whether licensed or not, suitably qualified in accordance with Annex 1, 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 — aeroplanes* means the total time from the moment an aeroplane first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight.

*General aviation operation* means an aircraft operation other than a commercial air transport operation or an aerial work operation.

*Ground handling* means a 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.

*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) a two-dimensional (2D) instrument approach operation, using lateral navigation guidance only; and b) a three-dimensional (3D) instrument approach operation, using both lateral and vertical navigation guidance.

*Instrument approach procedure IAP* means a series of predetermined maneuvers 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* that is an instrument approach procedure designed for 2D instrument approach operations Type A.
- b) *Approach procedure with vertical guidance (APV)* that is a performance-based navigation (PBN) instrument approach procedure designed for 3D instrument

approach operations Type A.

- c) *Precision approach (PA) procedure* that is 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.

*Isolated aerodrome* means a destination aerodrome for which there is no destination alternate aerodrome suitable for a given aeroplane type.

*Landing distance available (LDA)* means the length of runway which is declared available and suitable for the ground run of an aeroplane landing.

*Large aeroplane* means an aeroplane of a maximum certificated take-off mass of over 5 700 kg.

*Maintenance* means 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.

*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* means 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.

*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 diversion time* means maximum allowable range, expressed in time, from a point on a route to an en-route alternate aerodrome.

*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.

*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.

*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.

*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 aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned.

*Operations manual* means a 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.

*Pressure-altitude* means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.

*Psychoactive substances* means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

*Repair* means 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.

*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 center line of a runway can see the runway surface markings or the lights delineating the runway or identifying its center 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.

*Small aeroplane* means an aeroplane of a maximum certificated take-off mass of 5 700 kg or less.

*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 the 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's 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.

*Target level of safety (TLS)* means a generic term representing the level of risk which is considered acceptable in particular circumstances.

*Threshold time* means the range, expressed in time, established by the Authority, to an en-route alternate aerodrome, whereby any time beyond requires an EDTO approval from the Authority.

*Total vertical error (TVE)* means the vertical geometric difference between the actual pressure altitude flown by an aircraft and its assigned pressure altitude (flight level).

*Visual meteorological conditions (VMC)* means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling\*, equal to or better than specified minima.

Applicability	<p><b>3.</b> These regulations shall be applicable to the operation of all aeroplanes by Operators authorized to conduct both international and domestic commercial air transport operations.</p>
<p><b>PART II GENERAL</b></p>	
Compliance with laws, regulations and procedures	<p><b>4.</b> (1) The operator shall ensure that all its employees when abroad comply with the laws, regulations and procedures of those States in which operations are conducted.</p>
	<p>(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 aerodromes to be used and the air navigation facilities relating thereto.</p>
	<p>(3) The operator shall ensure that members of the flight crew other than pilots are familiar with these laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aeroplane.</p>
	<p>(4) The operator or a designated representative shall have responsibility for operational control.</p>
	<p>(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 of control and supervision of flight operations requires the use of flight operations officer/flight dispatcher personnel.</p>
	<p>(6) When an emergency situation which endangers the safety of the aeroplane or persons becomes known first to the flight operations officer/flight dispatcher, action by that person shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.</p>
	<p>(7) When an emergency situation which endangers the safety of the aeroplane 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.</p>
	<p>(8) when 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 the reports shall be submitted within ten days.</p>
	<p>(9) Operators shall ensure that pilots-in-command have available on board the aeroplane all the essential information concerning the search and rescue services in the area over which the aeroplane will be flown.</p>
	<p>(11) Every person and every aircraft shall comply with the Civil Aviation (Rules of the Air) Regulations.</p>
	<p>(12) Operators shall ensure that an aeroplane-</p> <ul style="list-style-type: none"> <li>a) has equipment and instruments;</li> <li>b) has communication, navigation and surveillance equipment,</li> </ul> <p>in the manner provided in the Civil Aviation (Instrument and Equipment ) Regulations.</p>
Registration markings	<p><b>5.</b> A person shall not operate an aircraft registered in [State] or a foreign-registered aircraft in [State] airspace unless that aircraft displays the proper markings prescribed in the Civil Aviation (Aircraft Registration and Marking) Regulations, 2019.</p>
airworthiness and safety	<p><b>6.</b> An operator shall develop procedures to ensure that a flight is not commenced unless-</p> <ul style="list-style-type: none"> <li>(a) the aeroplane is airworthy, duly registered and that appropriate certificates with respect</li> </ul>

precautions	<p>thereto are aboard the aeroplane;</p> <p>(b) the instruments and equipment installed in the aeroplane are appropriate, taking into account the expected flight conditions;</p> <p>(c) any necessary maintenance has been performed in accordance with these Regulations;</p> <p>(d) the mass of the aeroplane and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected;</p> <p>(e) any load carried is properly distributed and safely secured; and</p> <p>(f) the aeroplane operating limitations, contained in the flight manual, or its equivalent, will not be exceeded.</p>
Certificate of airworthiness	<p>A person shall not operate an aircraft with a certificate of airworthiness except as provided in the limitations issued with that certificate in accordance with the Civil Aviation (Airworthiness) Regulations, 2019.</p>
Inoperative instruments and equipment	<p>7. (1) A person shall not:</p> <p>(a) commence an aircraft flight with inoperative instruments or equipment installed, except as authorised by the Authority;</p> <p>(b) operate a multi-engine aircraft in commercial air transport with inoperative instruments and equipment installed unless the following conditions are met-</p> <p>(i) an approved MEL exists for that aircraft;</p> <p>(ii) the Authority has issued operations specifications authorizing operations in accordance with an approved MEL;</p> <p>(iii) the flight crew has direct access at all times prior to flight to all of the information contained in the approved MEL through printed or other means approved by the Authority in the operations specifications which constitutes an approved change to the type design without requiring desertification;</p> <p>(iv) the approved MEL which shall-</p> <p>(aa) be prepared in accordance with the limitations specified in sub-regulation (X)); and</p> <p>(bb) provide for the operation of the aircraft with certain instruments and equipment in an inoperative condition;</p> <p>(v) records identifying the inoperative instruments and equipment and the information required by paragraph (c) which shall be available to the pilot; and</p> <p>(vi) the aircraft is operated under all applicable conditions and limitations contained in the Minimum Equipment List and the operations specifications authorising use of the MEL.</p> <p>(3) Flight operations with inoperative instruments and equipment installed may be allowed in situations where no master minimum equipment list is available and no minimum equipment list is required for the specific aircraft operation under these Regulations.</p> <p>(4) The inoperative instruments and equipment referred to in subregulation (3)</p> <p>(1) shall not be-</p> <p>(a) part of the visual flight rules day instruments and equipment prescribed in the Civil Aviation (Instruments and Equipment) Regulations, 2019.</p> <p>(b) required on the aircraft's equipment list or the operations equipment list for the kind of flight operation being conducted;</p> <p>(c) required by the Civil Aviation (Instruments and Equipment) Regulations, 2019 for the specific kind of flight operation being conducted; or</p> <p>(d) required to be operational by an airworthiness directive.</p> <p>(5) The Authority may authorise a person to operate an aircraft with inoperative instruments and equipment where such instruments and equipment are:-</p> <p>(a) determined by the pilot-in-command not to be a hazard to safe operation;</p> <p>(b) deactivated and placarded "Inoperative"; and</p>

	<p>(c) removed from the aircraft, the cockpit control placarded and the maintenance recorded in accordance with the Civil Aviation (Airworthiness) Regulations (citation), as amended.</p> <p>(6) Where deactivation of the inoperative instrument or equipment involves maintenance, it shall be accomplished and recorded in accordance with the Civil Aviation (Airworthiness) Regulations, 2019.</p> <p>(7) The following instruments and equipment shall not be included in the MEL-</p> <p>(a) instruments and equipment that are either specifically or otherwise required by the certification airworthiness requirements and which are essential for safe operations under all operating conditions;</p> <p>(b) instruments and equipment required for operable condition by an airworthiness directive, unless the airworthiness directive provides otherwise; or</p> <p>(c) instruments and equipment required for specific operations.</p>
Aircraft flight manual, marking and placard requirements	<p><b>8.</b> (1) A person shall not operate an aircraft registered in [State] unless there is available in the aircraft-</p> <p>(a) a current, approved Aeroplane Flight Manual;</p> <p>(b) an Operations Manual approved by the Authority for the AOC;</p> <p>(c) the General operations manual describing the content and use of the operational flight plan.</p> <p>(2) A person operating an aircraft under these Regulations shall display in the aircraft all placards, listings, instrument markings or combination thereof, containing those operating limitations prescribed by the aircraft's State of Registry for visual presentation.</p> <p>(3) Each AFM shall be updated by implementing changes made mandatory by the State of Registry.</p>
Required aircraft and equipment	<p><b>9.</b> (1) A person shall not operate an aircraft registered in [State] unless he is authorised by the Authority and the aircraft has had the following inspections-</p> <p>(a) an annual inspection within the past twelve months;</p> <p>(b) a one hundred hour inspection;</p> <p>(c) an altimeter and pilot-static system inspection in the past twelve months;</p> <p>(d) for transponder equipped aircraft, a transponder check within the past twelve months; and</p> <p>(e) for emergency locator transmitter-equipped aircraft, an emergency locator transmitter check within the past twelve months.</p> <p>(2) The Aircraft for remuneration or hire operations maintained under maintenance and inspection programme approved by the Authority, shall not require current annual or one hundred hour inspections in their maintenance records.</p>
An Electronic Flight Bag	<p><b>10.</b> (1) An Operator who uses an Electronic Flight Bag on board an aircraft shall ensure that:</p> <p>(a) it is approved by the Authority;</p> <p>(b) it does not affect the performance of the aircraft systems, equipment or the ability to operate;</p> <p>(c) he assesses the safety risks associated with each function;</p> <p>(d) he establishes and documents the procedures for use of and training requirements for the device and each function; and</p> <p>(e) in the event of any failure, sufficient information is readily available to the flight crew for the flight to be conducted safely.</p> <p>(2) In approving the use of Electronic Flight Bags, the Authority shall ensure that:</p> <p>(a) the Electronic Flight Bag equipment and its associated installation hardware, including interaction with aircraft systems, if applicable, meet the appropriate airworthiness certification requirements;</p> <p>(b) the operator has assessed the safety risks associated with the operations supported by the Electronic Flight Bag functions;</p>

	<p>(c) the operator has established requirements for redundancy of the information, if appropriate, contained in and displayed by the Electronic Flight Bag functions; and</p> <p>(d) the operator has established and documented procedures for the management of the Electronic Flight Bag functions including any database it may use and its training requirements.</p>
<p>Documents to be carried on aircraft</p>	<p><b>11.</b> (1) A person shall not fly an aircraft unless it carries documents which are required to be carried on board under the law of the State of Registry.</p> <p>(2) An aircraft registered in [State] shall, when in flight, have on board the documents specified in this regulation, except that if the flight is intended to begin and end at the same aerodrome and does not include passage over the territory of any other State other than the [State] , the documents may be kept at the aerodrome instead of being carried aboard the aircraft.</p> <p>(3) The documents to be carried in an aircraft are-</p> <p>(a) on a flight for the purpose of commercial air transport:</p> <ul style="list-style-type: none"> <li>(i) licence in force in respect of the aircraft radio station installed in the aircraft;</li> <li>(ii) the certificate of airworthiness in force in respect of the aircraft;</li> <li>(iii) the licences and certificates of members of the flight crew of the aircraft;</li> <li>(iv) one copy of mass and balance documentation, if any, required with respect to the flight</li> <li>(v) one copy of the certificate of release to service, if any, in force with respect to the aircraft;</li> <li>(vi) the technical logbook required by these Regulations;</li> <li>(vii) the operations manual required by these Regulations to be carried on the flight;</li> <li>(viii) aircraft certificate of registration;</li> <li>(ix) aircraft journey logbook;</li> <li>(x) list of passenger names and points of embarkation and disembarkation;</li> <li>(xi) cargo manifest including special loads information if applicable;</li> <li>(xii) certified true copy of the AOC and operations specifications relevant to the aircraft type, issued in conjunction with the certificate;</li> <li>(xiii) noise certificate, if required;</li> <li>(xiv) aeroplane flight manual or rotorcraft flight manual;</li> <li>(xv) minimum equipment list;</li> <li>(xvi) category II or III Manual, as applicable;</li> <li>(xvii) operational flight plan;</li> <li>(xviii) filed notice to Airmen (NOTAMS) briefing documentation;</li> <li>(xix) meteorological information;</li> <li>(xx) maps and charts required for the flight and possible diversions;</li> <li>(xxi) forms for complying with the reporting requirements of the Authority and the AOC holder list of special situation passengers;</li> <li>(xxii) list of special situation passengers;</li> <li>(xxiii) filed (ATC flight plan);</li> <li>(xxiv) Search and rescue information;</li> <li>(xxv) any other document which may be required by the Authority or States concerned with a flight.</li> </ul> <p>(b) on a flight which includes passage over a territory of any country other than [State] for the purpose of commercial air transport and aerial work-</p> <ul style="list-style-type: none"> <li>(i) those documents set forth in sub paragraph (a): and</li> <li>(ii) a copy of notified procedure to be followed by the PIC of an intercepted aircraft and the notified visual signals for use by intercepting and intercepted aircraft; and</li> <li>(iii) general declaration.</li> </ul> <p>(c) on a flight for the purpose of aerial work-</p>

	<ul style="list-style-type: none"> <li>(i) licence in force in respect of the aircraft radio station installed in the aircraft;</li> <li>(ii) the certificate of airworthiness in force in respect of the aircraft;</li> <li>(iii) the licences and certificates of members of the flight crew of the aircraft;</li> <li>(iv) the technical logbook required by these Regulations;</li> <li>(v) one copy of the certificate of release to service, if any, in force with respect to the aircraft;</li> <li>(vi) aircraft certificate of registration; and</li> <li>(vii) any other document required by the Authority.</li> </ul> <p>(d) on a flight which includes passage over a territory of any country other [State] for the purpose of aerial work-</p> <ul style="list-style-type: none"> <li>(i) those documents set forth in paragraph (c); and</li> <li>(ii) a copy of notified procedure to be followed by PIC of an intercepted aircraft and the notified visual signals for use by intercepting and intercepted aircraft;</li> </ul> <p>(4) Where the certificate and the associated operations specifications are issued by the State of the Operator in a language other than English, an English translation shall be included.</p>
Production of documents	<p><b>12.</b> (1) A PIC shall, after being requested to do so by an authorized person, produce for examination by that person-</p> <ul style="list-style-type: none"> <li>(a) the certificates of registration and airworthiness in force in respect of the aircraft;</li> <li>(b) the licences and certificates of crew members, as applicable; and</li> <li>(c) such other documents as required by regulation 10 to be on board the aircraft when in flight.</li> </ul> <p>(2) The operator of an aircraft registered in [State] shall, after being requested to do so by an authorized person, produce to that person any of the following documents or records requested by that person, being documents or records which are required by or under these Regulations to be in force or to be carried, preserved or made available-</p> <ul style="list-style-type: none"> <li>(a) licence in force in respect of the aircraft radio station installed in the aircraft;</li> <li>(b) the certificate of airworthiness in force in respect of the aircraft;</li> <li>(c) the certificate of registration in force with respect to the aircraft;</li> <li>(d) the aircraft logbook, engine logbooks and variable pitch propeller logbooks required under these Regulations to be kept;</li> <li>(e) the mass and balance documentation, if any, required to be preserved under these Regulations;</li> <li>(f) any records of flight time, duty periods and rest periods which are required to be preserved by these Regulations, and such other documents and information in the possession or control of the operator, as the authorized person may require for the purpose of determining whether those records are complete and accurate;</li> <li>(g) any operations manuals or other data required to be made available under these Regulations; and</li> <li>(h) the record made by any flight recorder installed under the Civil Aviation (Instrument and Equipment) Regulations, 2019</li> </ul> <p>(3) The holder of a licence or certificate granted or rendered valid under the Civil Aviation (Personnel Licensing) Regulations, 2019 shall, after being requested to do so by an authorized person, produce to that authorized person, his licence, certificate, including any validation thereof.</p> <p>(4) Every person required by the Civil Aviation (Personnel Licensing) Regulations, 2019 to keep a personal flying log-book shall-</p> <ul style="list-style-type: none"> <li>(a) keep such records for a period of not less than two years after the date of the last entry therein; and</li> <li>(b) produce it to an authorized person immediately, and in any case not later than fourteen days after being requested to do so.</li> </ul>

<p>Preservation of documents</p>	<p><b>13.</b> (1) Subject to sub-regulation (2) a person required by these Regulations to preserve any documents or records by reason of his being the operator of an aircraft shall, if he ceases to be the operator of the aircraft, continue to preserve the documents or records as if he had not ceased to be the operator, and in the event of his death the duty to preserve the documents or records shall fall upon his personal representative.</p> <p>(2) Where:</p> <p>(a) another person becomes the operator of the aircraft, the first mentioned operator or his personal representative shall deliver to that person upon demand the certificate of release to service, the logbooks and the mass and balance schedule and any record made by a flight recorder and preserved in accordance with these Regulations which are in force or required to be preserved in respect of that aircraft;</p> <p>(b) an engine or variable pitch propeller is removed from the aircraft and installed in another aircraft operated by another person the first mentioned operator or his personal representative shall deliver to that person upon demand the logbook relating to that engine or propeller;</p> <p>(c) any person in respect of whom a record has been kept by the first mentioned operator in accordance with these Regulations becomes a flight crew member of an aircraft registered in [State] engaged in commercial air transport operations in the [State] and operated by another person, the first-mentioned operator or his personal representative shall deliver those records to that other person upon demand;</p> <p>(3) It shall be the duty of the other person referred to in paragraphs (2)(a), (2)(b) and (2)(c) to deal with the documents or records delivered to him as if he were the first mentioned operator.</p>
<p>Insurance</p>	<p><b>14.</b> (1) A person shall not fly, or cause any other person to fly an aircraft unless there is in force an insurance policy in respect of third party risks.</p> <p>(2) The insurance policy for commercial air transport aircraft shall cover insurance in respect of passengers' liability, cargo, baggage and mail risks.</p> <p>(3) The minimum sum of insurance in respect of any aircraft insured in accordance with sub-regulation (2) shall be notified by the Authority.</p>
<p>Stowaways</p>	<p>X. A person shall not hide himself in an aircraft for the purpose of being carried in the aircraft without the consent of either the operator or the pilot in command thereof or of any other person entitled to give consent to his being carried in the aircraft.</p>
<p>Co-ordination of activities potentially hazardous to civil aircraft</p>	<p><b>15.</b> (1) A person shall not carry out activities potentially hazardous to a civil aircraft whether flying over [State] or over the territorial waters of [State] without approval from the Authority.</p> <p>(2) Notwithstanding the generalities of sub-regulation (1)-</p> <p>(a) a person shall not intentionally project, or cause to be projected, a laser beam or other directed high intensity light at an aircraft in such a manner as to create a hazard to aviation safety, damage to the aircraft or injury to its crew or passengers;</p> <p>(b) a person using or planning to use lasers or other directed high intensity lights outdoors in such a manner that the laser beam or other light beam may enter navigable airspace with sufficient power to cause an aviation hazard shall provide written notification to the competent authority;</p> <p>(c) a pilot in command shall not deliberately operate an aircraft into a laser beam or other directed high-intensity light unless flight safety is ensured. This may require mutual agreement by operator of the laser emitter or light source, the pilot in command and the competent Authority.</p> <p>(3) A person shall not release into the atmosphere any radioactive material or toxic chemicals which may affect the safety of aircraft operating within [State] airspace.</p>

<p>Power to prohibit or restrict flying or landing or taking off</p>	<p><b>16.</b> (1) Where the Authority deems it necessary in the public interest to restrict or prohibit-</p> <p>(a) flying over any area of the United Republic of Tanzania or along any route therein; or</p> <p>(b) landing or take-off at any place in the United Republic of Tanzania by reason of-</p> <p>(i) the intended gathering or movement of a large number of persons;</p> <p>(ii) the intended holding of an aircraft race contest or of an exhibition of flying; or</p> <p>(iii) national security or any reason affecting public interest, may make orders prohibiting, restricting or imposing conditions on flight by any aircraft, whether or not registered in [State], in any airspace [State] and by an aircraft registered in [state] , in any other airspace, being airspace in respect of which [State] has in pursuance of international arrangements undertaken to provide navigation services for aircraft.</p> <p>(2) Orders made under this regulation may apply either generally or in relation to any class of aircraft.</p> <p>(3) It shall be an offence to contravene or permit the contravention of or fail to comply with any Orders made hereunder.</p> <p>(4) If the pilot-in-command (PIC) becomes aware that he is flying in contravention of any regulation which have been made for any of the reasons referred to in sub-regulation (1)(b)(iii) he shall, unless otherwise instructed pursuant to sub-regulation (5), cause the aircraft to leave the area to which the order relate by flying to the least possible extent over such area and the aircraft shall not begin to descend while over such an area.</p> <p>(5) The PIC flying either within an area for which Orders have been made for any of the reasons referred to in sub-regulation (1)(b)(iii) or within airspace notified as a danger area shall forthwith comply with instructions given by radio by the appropriate air traffic services unit or by, or on behalf of, the person responsible for safety within the relevant airspace.</p>
<p>Balloons, kites and airships</p>	<p><b>17.</b> (1) A person shall not, within [State]-</p> <p>(a) fly a captive balloon or kite at a height of more than 200 feet above the ground level or within 200 feet of any vessel, vehicle or structure;</p> <p>(b) fly a captive balloon within an aerodrome traffic zone;</p> <p>(c) fly a balloon exceeding 6 feet in any linear dimension at any stage of its flight, including any basket or other equipment attached to the balloon, in controlled airspace;</p> <p>(d) fly a kite within an aerodrome traffic zone;</p> <p>(e) moor an airship; or</p> <p>(f) fly a free balloon at night, without the permission in writing of the Authority, and in accordance with any conditions subject to which the permission may be granted.</p> <p>(2) A captive balloon when in flight shall not be left unattended unless it is fitted with a device which ensures automatic deflation if it breaks.</p> <p>(3) An unmanned free balloon shall be operated in such a manner as to minimize hazards to persons, property or other aircraft.</p>
<p>Compliance by a foreign operator with laws, regulations and procedures of an Authority.</p>	<p><b>18.</b> (1) When the Authority identifies a case of non-compliance or suspected non-compliance by a foreign operator with laws, regulations and procedures applicable within [the State], 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 Operator</p> <p>(2) Where the Authority 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.</p>

	<p>(3) In the case of notification to States as specified in sub regulations (1) and (2), 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.</p>
Surveillance of operations by a foreign operator	<p><b>19.</b> (1) The Authority shall recognize as valid an air operator certificate issued by another Contracting State, if the requirements under which the certificate was issued are at least equal to the applicable international Standards and the Civil Aviation (Commercial Air Transport Operations by Foreign Air Operator in and out of the United Republic of Tanzania) Regulations.</p> <p>(2) The Authority shall establish a programme with procedures for the surveillance of operations in their territory by a foreign operator and for taking appropriate action when necessary to preserve safety.</p> <p>(3) An operator shall meet and maintain the requirements established by the Authority of the state in which the operations are conducted.</p>
Safety management	<p><b>20.</b> (1) The operator of an aeroplane of a maximum certificated take-off mass in excess of 27 000 kg shall establish and maintain a flight data analysis Programme as part of the safety management system.</p> <p>(2) The operator of an aeroplane of a certificated take-off mass in excess of 20, 000 kg may establish and maintain a flight data analysis Programme as part of the safety management system.</p> <p>(3) The operator may contract the operation of a flight data analysis Programme to another party while retaining overall responsibility for the maintenance of such a Programme.</p> <p>(4) A flight data analysis Programme shall be non-punitive and contain adequate safeguards to protect the source of the data.</p> <p>(5) The Operator shall establish a flight safety documents system for the use and guidance of operational personnel, as part of its safety management system.</p> <p>(6) [As of 7 November 2019,] The Authority 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, except where the recordings or transcripts are:</p> <ul style="list-style-type: none"> <li>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 the Model EAC Civil Aviation(Safety Management Systems) Regulations;</li> <li>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 the Model EAC Civil Aviation(Safety Management Systems) Regulations; or</li> <li>c) used for inspections of flight recorder systems as provided in the Model EAC Civil Aviation Instruments and Equipment Regulations.</li> </ul> <p>(7) [As of 7 November 2019], the Authority shall not allow the use of recordings or transcripts of FDR, ADRS as well as Class B and Class C AIR and AIRS for purposes other than the investigation of an accident or incident as per Accident and Investigation Regulations, except where the recordings or transcripts are subject to the protections accorded by Model EAC Civil Aviation(Safety Management Systems) Regulations and are:</p> <ul style="list-style-type: none"> <li>a) used by the operator for airworthiness or maintenance purposes;</li> <li>b) used by the operator in the operation of a flight data analysis Programme required in these Regulations;</li> <li>c) sought for use in proceedings not related to an event involving an accident or incident investigation;</li> <li>d) de-identified; or</li> <li>e) disclosed under secure procedures.</li> </ul> <p>(8) [As of 7 November 2019], the operator shall establish a flight safety documents</p>

	system, for the use and guidance of operational personnel as part of its safety management system.
Imperilling the safety of persons and property	A person shall not wilfully, recklessly or negligently cause or permit an aircraft to endanger any life or property.
Use of psychoactive substances.	<b>21.</b> (1) No member of a flight crew shall perform any function specified in the privileges applicable to his or her license if he or she is under the influence of any psychoactive substance which may render him unable to perform such functions in a safe and proper manner.
	(2) No person whose function is critical to the safety of aviation (safety-sensitive personnel) shall undertake that function while under the influence of any psychoactive substance, by reason of which human performance is impaired.
	(3) The person referred to in sub regulation (1) and (2) shall not engage in any kind of problematic use of substances.
Aircraft tracking	<b>22.</b> (1) The operator shall establish an aircraft tracking capability to track aeroplanes throughout its area of operations.
	(2) The operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) under the following conditions: <ul style="list-style-type: none"> <li>a) the aeroplane has a maximum certificated take-off mass of over 27 000 kg and a seating capacity greater than 19; and</li> <li>b) Where an ATS unit obtains aeroplane position information at greater than 15 minute intervals.</li> </ul>
	(3) The operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) that is planned in an oceanic area(s) under the following conditions: <ul style="list-style-type: none"> <li>a) the aeroplane has a maximum certificated take-off mass of over 45 500 kg and a seating capacity greater than 19; and</li> <li>b) Where an ATS unit obtains aeroplane position information at greater than 15 minute intervals.</li> </ul>
	(4) Notwithstanding the provisions in sub regulations (2) and (3), the Authority may, based on the results of an approved risk assessment process implemented by the operator, allow for variations to automated reporting intervals.
	(5) The risk assessment process shall demonstrate how risks to the operation resulting from such variations can be managed and shall include at least the following: <ul style="list-style-type: none"> <li>a) capability of the operator's operational control systems and processes, including those for contacting ATS units;</li> <li>b) overall capability of the aeroplane and its systems;</li> <li>c) available means to determine the position of, and communicate with, the aeroplane;</li> <li>d) frequency and duration of gaps in automated reporting;</li> <li>e) human factors consequences resulting from changes to flight crew procedures; and</li> <li>f) specific mitigation measures and contingency procedures.</li> </ul>
	(6) The operator shall establish procedures, approved by the Authority, for the retention of aircraft tracking data to assist search and rescue in determining the last known position of the aircraft.
<b>PART III: FLIGHT OPERATIONS</b>	
Operating facilities	<b>23.</b> (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

	<p>available and directly required on such flight, for the safe operation of the aeroplane 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.</p> <p>(2) The operator shall ensure that any inadequacy of facilities observed in the course of operations is reported to the authority responsible for them without undue delay.</p> <p>(3) Subject to their published conditions of use, aerodromes and their facilities shall be kept continuously available for flight operations during their published hours of operations, irrespective of weather conditions.</p> <p>(4) The operator shall, as part of its safety management system, assess the level of rescue and firefighting service (RFFS) protection available at any aerodrome intended to be specified in the operational flight plan in order to ensure that an acceptable level of protection is available for the aeroplane intended to be used.</p>
	<p>(5) Information related to the level of RFFS protection that is deemed acceptable by the operator shall be contained in the operations manual.</p>
Operational certification and supervision -	<p><b>24.</b> (1) The issue 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.</p> <p>(2) The operator shall develop policies and procedures for third parties that perform work on its behalf.</p>
Air Operator Certificate	<p><b>25.</b> (1) The operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate issued by the Authority.</p> <p>(2) The air operator certificate shall authorize the operator to conduct commercial air transport operations in accordance with the operations specifications.</p> <p>(3) The continued validity of an air operator certificate shall depend upon the operator maintaining the requirements in regulation 10(1) under the supervision of the Authority.</p> <p>(4) The air operator certificate shall be in the Layout as contained in First Schedule of the Model EAC Civil Aviation(Air Operator Certification and Administration) Regulations and shall contain at least the following information :</p> <ol style="list-style-type: none"> <li>the Authority and the issuing authority;</li> <li>the air operator certificate number and its expiration date;</li> <li>the operator name, trading name (if different) and address of the principal place of business;</li> <li>the date of issue and the name, signature and title of the authority representative; and</li> <li>the location, in a controlled document carried on board, where the contact details of operational management can be found;</li> </ol> <p>(5) The operations specifications associated with the air operator certificate shall be in the layout as contained in the Second Schedule of the Model EAC Civil Aviation (Air Operator Certification and Administration) Regulations and shall contain at least the following information</p> <ol style="list-style-type: none"> <li>Each aircraft model in the operator's fleet, identified by aircraft make, model and series, the list of authorizations, conditions and limitations shall be included;</li> <li>issuing authority contact details;</li> <li>operator name and AOC number,</li> <li>date of issue and signature of the authority representative,</li> <li>aircraft model, types and area of operations,</li> <li>special limitations and authorizations.</li> </ol> <p>(6)The Authority shall establish a system for both the certification and the continued surveillance of the operator and the Model EAC Civil Aviation (safety management) Regulations to ensure that the required standards of operations established in this regulation are maintained.</p>

Surveillance of operations by a foreign operator	<b>26.</b> (1) The Authority 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 in the <u>Model EAC Civil Aviation (safety management) Regulations</u> .
	(2) The Authority shall establish a Programme with procedures for the surveillance of operations in their 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	<b>27.</b> (1) The operator shall provide, for the use and guidance of operations personnel concerned, an approved operation manual as described in the Third Schedule of the <u>Model EAC Civil Aviation (Air Operator Certification and Administration) Regulations</u> .
	(2) The operations manual shall be amended or revised as necessary to ensure that the information contained therein is kept up to date.
	(3) All amendments or revisions shall be issued to all personnel that are required to use the manual.
	(4) The Authority shall establish a requirement for the operator to provide a copy of the operations manual together with all amendments and revisions, for review, acceptance and where required approval.
	(5) The operator shall incorporate in the operations manual such mandatory material as the Authority may require.
Operating instructions — General	<b>28.</b> (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) An aeroplane shall not be taxied on the movement area of an aerodrome unless the person at the controls: <ul style="list-style-type: none"> <li>(a) has been duly authorized by the operator or a designated agent;</li> <li>(b) is fully competent to taxi the aeroplane;</li> <li>(c) is qualified to use the radiotelephone; and</li> <li>(d) has received instruction from a competent person in respect of aerodrome layout, routes, signs, marking, lights, air traffic control (ATC) signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aeroplane movement at the aerodrome.</li> </ul>
	(3) The operator shall issue operating instructions and provide information on aeroplane climb performance with all engines operating to enable the pilot-in-command to determine the climb gradient that can be achieved during the departure phase for the existing take-off conditions and intended take-off technique and this information shall be included in the operations manual.
In-flight simulation of emergency situations	<b>29.</b> The operator shall ensure that when passengers or cargo are being carried, no emergency or abnormal situations shall be simulated
Checklists	<b>30.</b> (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 an emergency, to ensure compliance with the operating procedures contained in the aircraft operating manual and the aeroplane 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.
Altimeter settings.	<b>31.</b> A person operating an aircraft registered in [State] shall set the aircraft altimeters to maintain the cruising altitude for flight level reference in accordance with the procedure notified by-

	<p>(a) the State where the aircraft may be; or</p> <p>(b) the Aeronautical Information Publication.</p>
Operation of radio in aircraft	<p><b>32.</b> (1) The radio station in an aircraft shall not be operated, whether or not the aircraft is in flight, except in accordance with the conditions of the licence issued in respect of that station under the law of the State of registry, and by a person duly licensed or otherwise permitted to operate the radio station under that law.</p> <p>(2) Subject to sub-regulations (3) and (4) whenever an aircraft is in flight in such circumstances that it is required by or under these Regulations to be equipped with radio communications apparatus, a continuous radio watch shall be maintained by a member of a flight crew listening to the signals transmitted upon the frequency notified, or designated by a message received from an appropriate aeronautical radio station, for use by that aircraft.</p> <p>(3) The radio watch may be discontinued or continued on another frequency to the extent that a message as aforesaid so permits.</p> <p>(4) The watch may be kept by a device installed in the aircraft if the appropriate aeronautical radio station has been informed to that effect and has raised no objection; and that station is notified, or in the case of a station situated in a State other than [State], otherwise designated as transmitting a signal suitable for that purpose.</p> <p>(5) Whenever an aircraft is in flight in such circumstances that it is required by or under these Regulations to be equipped with radio or radio navigation equipment a member of the flight crew shall operate that equipment in such a manner as he may be instructed by the appropriate air traffic control unit or as may be notified in relation to any notified airspace in which the aircraft is flying.</p> <p>(6) The radio station in an aircraft shall not be operated so as to cause interference, that impairs the efficiency of aeronautical telecommunications or navigational services, and in particular emissions shall not be made except as follows-</p> <p>(a) emission of the class and frequency for the time being in use, in accordance with general international aeronautical practice, in the airspace in which the aircraft is flying;</p> <p>(b) distress, urgency and safety messages and signals, in accordance with general international aeronautical practice;</p> <p>(c) messages and signals relating to the flight of the aircraft, in accordance with general international aeronautical practice; and</p> <p>(d) such public correspondence messages as may be permitted by or under the aircraft radio station licence referred in sub-regulation (1).</p> <p>(7) In any aircraft registered in United Republic of Tanzania, which is engaged on a flight for the purpose of commercial air transport operations, the pilot and the flight engineer, if any, shall not make use of a hand-held microphone, whether for the purpose of radio communication or of intercommunication within the aircraft, whilst the aircraft is flying in controlled airspace below flight level 150 or is taking off or landing.</p> <p>(8) An aircraft which is equipped with a radio station having a defect such as to impair the safety of the aircraft shall not undertake any flight until the aircraft has been rendered safe, or if such defect occurs during flight, shall land as soon as possible unless the radio station can be and is speedily rendered safe for flight.</p>
Minimum Flight altitudes	<p><b>33.</b> (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 responsible State, provided that they shall not be less than those established by that State</p> <p>(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 responsible State, and shall</p>

	<p>include this method in the operations manual.</p> <p>(3) The minimum flight altitudes determined in accordance with the above method shall not be lower than specified in the Civil Aviation (Rules of the Air) Regulations.</p> <p>(4) The method for establishing the minimum flight altitudes shall be approved by the Authority.</p> <p>(5) The Authority shall approve minimum flight altitudes method after consideration of the probable effects of the following factors on the safety of the operation:</p> <ul style="list-style-type: none"> <li>(a) the accuracy and reliability with which the position of the aeroplane can be determined;</li> <li>(b) the inaccuracies in the indications of the altimeters used;</li> <li>(c) the characteristics of the terrain, including sudden changes in the elevation;</li> <li>(d) the probability of encountering unfavorable meteorological conditions , including severe turbulence and descending air currents;</li> <li>(e) possible inaccuracies in aeronautical charts; and</li> <li>(f) airspace restrictions.</li> </ul>
Aerodrome operating minima	<p><b>34.</b> (1)The Authority shall require that the operator establish aerodrome operating minima for each aerodrome to be used in operations and shall approve the method of determination of such minima.</p> <p>(2) This minima shall not be lower than any that may be established for such aerodromes by the State of the Aerodrome, except when specifically approved by that State.</p> <p>(3) The Authority may approve operational credit for operations with aeroplanes equipped with automatic landing systems, a HUD or equivalent displays, EVS, SVS or CVS.</p> <p>(4) The Authority shall ensure that operational credit approvals do not affect the classification of the instrument approach procedure.</p> <p>(5) for the purpose of this regulation “Operational credit” includes:</p> <ul style="list-style-type: none"> <li>(a) for the purposes of an approach ban, a minima below the aerodrome operating minima;</li> <li>(b) reducing or satisfying the visibility requirements; or</li> <li>(c) requiring fewer ground facilities as compensated for by airborne capabilities.</li> </ul> <p>(6) The Authority shall require that in establishing the aerodrome operating minima which will apply to any particular operation, full account is taken of:</p> <ul style="list-style-type: none"> <li>(a) the type, performance and handling characteristics of the aeroplane;</li> <li>(b) the composition of the flight crew, their competence and experience;</li> <li>(c) the dimensions and characteristics of the runways which may be selected for use;</li> <li>(d) the adequacy and performance of the available visual and non-visual ground aids;</li> <li>(e) the equipment available on the aeroplane for the purpose of navigation, acquisition of visual references and control of the flight path during the approach, landing and the missed approach;</li> <li>(f) the obstacles in the approach and missed approach areas and the obstacle clearance altitude or height for the instrument approach procedures;</li> <li>(g) the means used to determine and report meteorological conditions; and</li> <li>(h) the obstacles in the climb-out areas and necessary clearance margins.</li> </ul> <p>(7) 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:</p> <ul style="list-style-type: none"> <li>(a) Type A: a minimum descent height or decision height at or above 75 m (250 ft); and</li> <li>(b) Type B: a decision height below 75 m (250 ft) which are catergorised as follows <ul style="list-style-type: none"> <li>(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;</li> <li>(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;</li> <li>(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;</li> <li>(iv) Category IIIB (CAT IIIB): a decision height lower than 15 m (50 ft) or no</li> </ul> </li> </ul>

	<p>decision height and a runway visual range less than 175 m but not less than 50 m; and</p> <p>(v) Category IIIC (CAT IIIC): no decision height and no runway visual range limitations.</p> <p>(8) Category II and Category III of type B instrument approach operations shall not be authorized unless RVR information is provided.</p> <p>(9) For instrument approach operations, aerodrome operating minima below 800 m visibility shall not be authorized unless RVR information is provided.</p> <p>(10) 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, if necessary, cloud conditions.</p> <p>(11) 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.</p>
<p>Category II and III operations: general operating rules</p>	<p><b>35.</b> (1) A person shall not operate an aircraft in a category II or III operations unless-</p> <p>(a) the pilot-in-command and co-pilot of the aircraft hold the appropriate authorisations and ratings prescribed in the Civil Aviation (Personnel Licensing) Regulations;</p> <p>(b) each flight crew member has adequate knowledge of, and familiarity with, the aircraft and the procedures to be used; and</p> <p>(c) the instrument panel in front of the pilot who is controlling the aircraft has appropriate instrumentation for the type of flight control guidance system that is being used.</p> <p>(2) Unless otherwise authorised by the Authority, a person shall not operate an aircraft in a Category II or Category III operations unless each ground component required for that operation and the related airborne equipment is installed and operating.</p> <p>(3) Where the approach procedure being used provides for and requires the use of a decision height or decision altitude, the authorised decision height or decision altitude is the highest of the following-</p> <p>(a) the decision height or decision altitude prescribed by the approach procedure;</p> <p>(b) the decision height or decision altitude prescribed for the pilot in command; or</p> <p>(c) the decision height or decision altitude for which the aircraft is equipped.</p> <p>(4) Unless otherwise authorised by the Authority, a pilot operating an aircraft in a Category II or Category III approach that provides and requires use of a decision height or decision altitude shall not continue the approach below the authorised decision height unless-</p> <p>(a) the aircraft is in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal manoeuvres, and where that descent rate shall allow touchdown to occur within the touchdown zone of the runway of intended landing;</p> <p>(b) at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:-</p> <p>(i) the approach light system, except that the pilot shall not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable;</p> <p>(ii) the threshold or the threshold markings;</p> <p>(iii) the threshold lights;</p> <p>(iv) the touchdown zone or touchdown zone markings;</p> <p>(v) the touchdown zone lights.</p> <p>(5) Unless otherwise authorised by the Authority, a pilot operating an aircraft shall immediately execute an appropriate missed approach procedure whenever, prior to touchdown, the requirements of sub-regulation (4) are not met.</p> <p>(6) A person operating an aircraft using a Category III approach without decision height shall</p>

	<p>not land that aircraft except in accordance with the provisions of the letter of authorisation issued by the Authority.</p> <p>(7) Sub-regulations (1) to (6) do not apply to operations conducted by air operator certificate (AOC) holders issued with a certificate under the Civil Aviation (Air Operator Certification and Administration) Regulations.</p> <p>(8) A person shall not operate an aircraft in a Category II or Category III operations conducted by an AOC holder unless the operation is conducted in accordance with that AOC holder's specific operations specifications.</p>
<p>Category II and Category III: operations manual</p>	<p><b>36.</b> (1) Except as provided in sub-regulation (3), a person shall not operate an aircraft in a Category II or a Category III operation unless-</p> <p>(a) there is available in the aircraft a current and approved Category II or Category III manual, as appropriate, for that aircraft;</p> <p>(b) the operation is conducted in accordance with the procedures, instructions, and limitations in the appropriate manual; and</p> <p>(c) the instruments and equipment listed in the manual that are required for a particular Category II or Category III operation have been inspected and maintained in accordance with the maintenance programme contained in the manual.</p> <p>(2) An operator shall keep a current copy of each approved manual at its principal base of operations and shall make each manual available for inspection upon request by the Authority.</p> <p>(3) Sub-regulations (1) and (2) do not apply to operations conducted by an air operator certificate holder issued a certificate under the Civil Aviation (Air Operator Certification and Administration) Regulations.</p> <p>(4) An applicant for approval of a Category II or III operations manual or an amendment to an approved Category II operations manual shall submit the proposed manual or amendment to the Authority.</p> <p>(5) Where the application made under these Regulations is a request for an evaluation programme, the application shall include the following-</p> <p>(a) the location of the aircraft and the place where the demonstrations are to be conducted; and</p> <p>(b) the date the demonstrations are to commence (at least 10 days after filing the application).</p> <p>(6) A Category II or III operations manual shall contain-</p> <p>(a) the registration number, make, and model of the aircraft to which it applies;</p> <p>(b) a maintenance programme; and</p> <p>(c) the procedures and instructions related to-</p> <p>(i) recognition of decision height or decision altitude;</p> <p>(ii) use of runway visual range information;</p> <p>(iii) approach monitoring;</p> <p>(iv) the decision region, which is the region between the middle marker and the decision height or decision altitude;</p> <p>(v) the maximum permissible deviations of the basic instrument landing system indicator within the decision region;</p> <p>(vi) a missed approach procedure;</p> <p>(vii) use of airborne low approach equipment;</p> <p>(viii) minimum altitude for the use of the autopilot;</p> <p>(ix) instrument and equipment failure warning systems</p> <p>(x) instrument failure; and</p> <p>(xi) other procedures, instructions, and limitations as the Authority may deem necessary.</p>
<p>Threshold crossing height</p>	<p><b>37.</b> The operator shall establish operational procedures designed to ensure that an aeroplane being used to conduct 3D instrument approach operations crosses the threshold by a</p>

for 3D instrument approach operations	safe margin, with the aeroplane in the landing configuration and attitude.
Fuel and oil records	<b>38.</b> (1) The operator shall maintain fuel records to enable the Authority to ascertain that, for each flight, the requirements of Regulations 30 and 31 have been complied with.
	(2) The operator shall maintain oil records to enable the Authority to ascertain that trends for oil consumption are such that an aeroplane has sufficient oil to complete each flight.
	(3) Fuel and oil records shall be retained by the operator for a period of three months.
Crew- PIC	<b>39.</b> (1) The operator shall designate one pilot for each flight to act as pilot-in-command.
	(2) For each flight of an aeroplane above 15 000 m (49 000 ft), the operator shall maintain records so that the total cosmic radiation dose received by each crew member over a period of 12 consecutive months can be determined.
Pre-flight action	<p><b>40.</b> A pilot-in-command of an aircraft registered in [State] shall satisfy himself before the flight is commenced -</p> <p>(a) that the flight can safely be made, taking into account the latest information available as to the route and aerodromes to be used, the weather reports and forecasts available, and any alternative cause of action which can be adopted in case the flight cannot be completed as planned;</p> <p>(b) that the equipment, including radio apparatus, required by these Regulations to be carried is carried and is in a fit condition for use;</p> <p>(c) that the aircraft is in every way fit for the intended flight, and that, where a certificate of release to service is required by the Civil Aviation (Airworthiness) Regulations, to be in force, is in force and will not cease to be in force during the intended flight;</p> <p>(d) that the load carried by the aircraft is of such weight, and is so distributed and secured, that it may safely be carried on the intended flight.</p>
loading of aircraft	<p><b>41.</b> (1) An AOC holder shall not cause or permit an aircraft to be loaded for a flight for the purpose of commercial air transport except under the supervision of a person who the AOC holder has caused to be furnished with written instructions as to the distribution and securing of the load so as to ensure that-</p> <p>(a) the load may safely be carried on the flight; and</p> <p>(b) any condition subject to which the certificate of airworthiness in force in respect of the aircraft was issued or rendered valid, being conditions relating to the loading of the aircraft are complied with.</p> <p>(2) The instructions shall indicate the mass of the aircraft prepared for service, that is, the aggregate of the basic mass and the mass of such additional items in or on the aircraft as the operator thinks fit to include, and the instructions shall indicate the additional items included in the mass of the aircraft prepared for service, and shall show the position of the centre of gravity of the aircraft at that mass.</p> <p>(3) The provisions of sub-regulation (2) shall not apply in relation to a flight if-</p> <p>(a) the aircraft's authorized maximum take-off mass does not exceed 1150 kg; or</p> <p>(b) the aircraft's authorized maximum take-off mass does not exceed 2730 kg. and the flight is not intended to exceed sixty minutes in duration and is either a flight-</p> <p>(i) solely for training persons to perform duties in an aircraft; or</p> <p>(ii) intended to begin and end at the same aerodrome.</p> <p>(4) An operator of an aircraft shall not cause or permit the aircraft to be loaded in contravention of the instructions set out in sub-regulation (1).</p> <p>(5) A person supervising the loading of the aircraft shall, before the commencement of a flight:</p> <p>(a) prepare and sign a load sheet in duplicate conforming to the requirements specified in sub-</p>

regulation (7); and

(b) unless the operator is the pilot-in-command (PIC) of the aircraft, submit the load sheet for examination by the PIC of the aircraft who shall, upon being satisfied that the aircraft is loaded in the manner required by sub-regulation (1), sign his name thereon;

(6) The requirements of sub-regulation (5) shall not apply where-

(a) the load and the distributing and securing thereof upon the next intended flight are to be unchanged from the previous flight and the PIC of the aircraft makes and signs an endorsement to that effect upon the load sheet for the previous flight, indicating the date of the endorsement, the place of departure upon the next intended flight and the next intended destination; or

(b) as set out in sub-regulation (3), sub-regulation (2) does not apply in relation to the flight.

(7) A pilot operating an aircraft shall ensure that one copy of the load sheet shall be carried in the aircraft when so required by these Regulations, until the flights to which the load sheet relates have been completed, and one copy of that load sheet and of the instruction referred to in this regulation shall be preserved by the operator until the expiration of a period of six months thereafter, and shall not be carried in the aircraft.

(8) A load sheet required under sub-regulation (5) shall contain the following information-

(a) the nationality and registration marks of the aircraft to which the load sheet relates; particulars of the flight to which the load sheet relates;

(b) particulars of the flight to which the load sheet relates;

(c) the total mass of the aircraft as loaded for the flight;

(d) the mass of the several items from which the total mass of the aircraft, as so loaded, has been calculated including in particular the mass of the aircraft prepared for service and the respective total mass of the passengers, crew, baggage and cargo intended to be carried on the flight;

(e) the manner in which the load is distributed and the resulting position of the centre of gravity of the aircraft which may be given approximately if and to the extent that the relevant certificate of airworthiness so permits; and

(f) at the foot or end of the load sheet, a certificate signed by the person referenced in sub-regulation (1) as responsible for the loading of the aircraft, stating that the aircraft has been loaded in accordance with the written instructions furnished to him by the operator of the aircraft pursuant to that sub-regulation.

(9) For the purpose of calculating the total mass of the aircraft, the respective total mass of the passengers and crew entered in the load sheet shall be computed from the actual mass of each person, and for that purpose each person shall be separately weighed unless sub-regulations (10), (11) and (13) applies.

(10) When determining the actual mass by weighing, an operator must ensure that passengers' personal belongings and hand baggage are included and such weighing must be conducted immediately prior to boarding and at an adjacent location.

(11) An Operator shall compute the mass of passengers and checked baggage using the standard mass values specified in Tables 2 and 3 except where the number of passenger seats available is less than 10.

(12) The standard masses values include hand baggage and the mass of any infant below two years of age carried by an adult on one passenger seat and Infants occupying separate passenger seats must be considered as children for the purpose of this regulation.

(13) In cases where the number of passenger seats available is less than 10, passenger mass may be established by use of a verbal statement by or on behalf of each passenger and adding to it a predetermined constant to account for hand baggage and clothing.

(14) The procedure specifying when to select actual or standard masses and the procedure to be followed when using verbal statements must be included in the Operations manual.

(15) On flights where no hand baggage is carried in the cabin or where hand baggage is accounted for separately, 6 kg may be deducted from the male and female masses in table 1 below and articles such as an overcoat, an umbrella, a small handbag or purse, reading material or a small camera are not considered as hand baggage for the purpose of this regulation;

TABLE 2-COMPUTATION OF MASS OF PASSENGERS

Passenger seats	1-5	6-9	10-19	20 and more	30 and more
Male	104	96	92	88	84
Female	86	78	74	70	84
children	35	35	35	35	35

(16) Where the total number of passenger seats available on the aircraft is 20 or more the standard mass values given in Table 3 are applicable for each piece of checked baggage and for aircraft with less than 20 passenger seats the actual mass of checked baggage, determined by weighing, must be used.

Type of flight	Baggage standard mass
Domestic	11kgs
Regional	13kgs
Intercontinental	15kgs
All others	13kgs

(17) Where sub-regulation (10), (11) and (13) is applied, the load sheet shall bear a notation to that effect.

(18) Where sub-regulations (10), (11) and (13) may apply, the PIC shall, if the standard masses described in sub-regulation 10 appear to be inapplicable or doing so is in the interests of safety of the aircraft, require any or all of the passengers, crew and cargo to actually be weighed for the purpose of the entry to be made in the load sheet.

Stowage of baggage and cargo

**42.** (1) An operator shall establish procedures to ensure that only hand baggage is taken into the passenger cabin as can be adequately and securely stowed.

(2) An operator shall establish procedures to ensure that all baggage and cargo on board, which might cause injury or damage, or obstruct aisles and exits if displaced, is placed in storages designed to prevent its movement.

(3) The procedure referred to in sub-regulation (2) shall take account:

- (a) each item carried in cabin shall be stowed only in a location that is capable of restraining it;
- (b) mass limitations placarded on or adjacent to stowages shall not be exceeded;
- (c) under seat stowages shall not be used unless the seat is equipped with a restraint bar and the baggage is of such size that it may adequately be restrained by this equipment;
- (d) items shall not be stowed in toilets or against bulkheads that are incapable of restraining articles against movement forwards, sideways or upwards and unless the bulkheads carry a placard specifying the greatest mass that may be placed there;
- (e) baggage and cargo placed in lockers shall not be of such size that they prevent latched

	<p>doors from being closed securely;</p> <p>(f) baggage and cargo shall not be placed where it can impede access to emergency equipment; and</p> <p>(g) checks shall be made before take-off, before landing and whenever the fasten seat belts signs are illuminated or it is otherwise so ordered to ensure that baggage is stowed where it cannot impede evacuation from the aircraft or cause injury by falling or other movement, as may be appropriate to the phase of flight.</p>
Passengers	<p><b>43.</b> (1) The operator shall ensure that passengers are made familiar with the location and use of:</p> <ul style="list-style-type: none"> <li>(a) seat belts;</li> <li>(b) emergency exits;</li> <li>(c) life jackets, if the carriage of life jackets is prescribed;</li> <li>(d) oxygen dispensing equipment, if the provision of oxygen for the use of passengers is prescribed; and</li> <li>(e) other emergency equipment provided for individual use, including passenger emergency briefing cards.</li> </ul> <p>(2) The operator shall inform the passengers of the location and general manner of use of the principal emergency equipment carried for collective use.</p> <p>(3) The operator shall ensure that in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.</p> <p>(4) The operator 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 an aeroplane shall be secured in their seats by means of the seat belts or harnesses provided.</p>
Required passenger briefings	<p><b>44.</b> (1) A person shall not commence a take-off unless the passengers are briefed prior to take-off in accordance with the AOC holder's operations manual procedures on-</p> <ul style="list-style-type: none"> <li>(a) smoking limitations and prohibitions;</li> <li>(b) emergency exit location and use;</li> <li>(c) use of safety belts;</li> <li>(d) emergency floatation means location and use;</li> <li>(e) location and the general manner of use of the principal emergency equipment for collective use;</li> <li>(f) fire extinguisher location and operation;</li> <li>(g) placement of seat backs;</li> <li>(h) if flight is above 12,000 feet above mean sea level , the normal and emergency use of oxygen; and</li> <li>(i) the passenger briefing card.</li> </ul> <p>(2) Immediately before or after turning the seat belt sign off, PIC shall ensure that the passengers are briefed to keep their seat belts fastened while seated, even when the seat belt sign is off.</p> <p>(3) Before take-off, the PIC shall ensure that persons of reduced mobility are personally briefed on the-</p> <ul style="list-style-type: none"> <li>(a) route to the most appropriate exit; and</li> <li>(b) time to begin moving to the exit in event of an emergency.</li> </ul> <p>(4) The PIC operating a commercial air transport operations flight shall ensure that the briefing specified in this regulation contains all the objects approved for the specific operations conducted as included in the relevant operations manual.</p> <p>(5) The operator shall ensure that during take-off and landing and whenever, by reason of turbulence or any emergency occurring during flight the precaution is considered necessary, all passengers on board an aeroplane are secured in their seats by means of seat belts or harnesses</p>

	provided.
Carriage of persons with reduced mobility	<p><b>45.</b> A person shall not allow a person of reduced mobility to occupy seats where his presence could-</p> <ul style="list-style-type: none"> <li>(a) impede the crew in their duties;</li> <li>(b) obstruct access to emergency equipment; or</li> <li>(c) impede the emergency evacuation of the aircraft.</li> </ul>
Exit row seating	<p><b>46.</b> (1) A PIC shall ensure that no passenger sits in an emergency exit row if the PIC determines that it is likely that the passenger would be unable to understand and perform the functions necessary to open an exit and to exit rapidly.</p> <p>(2) A PIC shall ensure that a person is not seated in a passenger exit seat if it is likely that the person would be unable to perform one or more of the applicable functions listed below-</p> <ul style="list-style-type: none"> <li>(a) lacks sufficient mobility, strength, or dexterity in both arms and hands, and both legs to- <ul style="list-style-type: none"> <li>(i) reach upward, sideways, and downward to the location of emergency exit and exit-slide operating mechanisms;</li> <li>(ii) grasp and push, pull, turn, or otherwise manipulate those mechanisms;</li> <li>(iii) push, shove, pull, or otherwise open emergency exits;</li> <li>(iv) lift out, hold, deposit on nearby seats, or manoeuvre over the seatbacks to the next row objects the size and weight of overwing window exit doors;</li> <li>(v) remove obstructions of size and weight similar over-wing exit doors;</li> <li>(vi) reach the emergency exit expeditiously;</li> <li>(vii) maintain balance while removing obstructions;</li> <li>(viii) exit expeditiously;</li> <li>(ix) stabilise an escape slide after deployment;</li> <li>(x) assist others in getting off an escape slide;</li> </ul> </li> <li>(b) is less than fifteen years of age or lacks the capacity to perform one or more of the applicable functions listed in this regulation without assistance;</li> <li>(c) lacks the ability to read and understand instructions required by this regulation and related to emergency evacuation provided by the AOC holder in printed or graphic form or the ability to understand oral crew commands;</li> <li>(d) lacks sufficient visual capacity to perform one or more of the functions specified in paragraph (a) up to (c) without the assistance of visual aids beyond contact lenses or eyeglasses;</li> <li>(e) lacks sufficient aural capacity to hear and understand instructions given by cabin crew members, without assistance beyond a hearing aid;</li> <li>(f) lacks the ability to adequately impart information orally to other passengers; or</li> <li>(g) has a condition or responsibilities, such as caring for small children, that might prevent the person from performing one or more of the functions listed above or a condition that might cause the person harm if he performs one or more of the functions listed above.</li> </ul> <p>(3) Determination by a crew member as to the suitability of each person permitted to occupy an exit seat shall be made by the cabin crew members.</p> <p>(4) Where a cabin crew member determines that a passenger assigned to an exit seat would be unable to perform the emergency exit functions, or if a passenger requests a non-exit seat, the cabin crew member shall expeditiously relocate the passenger to a non-exit seat.</p> <p>(5) In the event of full booking in the non-exit seats, and if necessary to accommodate a passenger being relocated from an exit seat, the cabin crew member shall move a passenger who is willing and able to assume the evacuation functions, to an exit seat.</p> <p>(6) An AOC holder shall ensure that a ticket agent-</p> <ul style="list-style-type: none"> <li>(a) assign seats consistent with the passenger selection criteria and the emergency exit functions, to the maximum extent feasible, prior to boarding;</li> </ul>

	<p>(b) makes available for inspection by the public at all passenger loading gates and ticket counters at each aerodrome where it conducts passenger operations, written procedures established for making determinations in regard to exit row seating.</p> <p>(7) A cabin crew member shall include in the passenger briefings-</p> <p>(a) a request for a passenger to identify himself so as to allow reseating where the passenger:</p> <p>(i) cannot meet the selection criteria;</p> <p>(ii) has a non-discernible condition that shall prevent them from performing the evacuation functions;</p> <p>(iii) may suffer bodily harm as the result of performing one or more of those functions; or</p> <p>(iv) does not wish to perform emergency exit functions;</p> <p>(b) a reference to the passenger information cards and the functions to be performed in an emergency.</p> <p>(8) A passenger shall comply with instructions given by a crew member or other authorised employee of the AOC holder implementing exit seating restrictions.</p> <p>(9) A PIC shall not allow taxi or pushback of an aircraft unless at least one required crew member has verified that all exit rows and escape paths are unobstructed and that no exit seat is occupied by a person the crew member determines is likely to be unable to perform the applicable evacuation functions. (10) In order to comply with this regulation an AOC holder shall</p> <p>(a) establish procedures that address the requirements of this regulation; and</p> <p>(b) submit their procedures for preliminary review and approval to the Authority.</p> <p>(11) The procedures required by this regulation shall not become effective until final approval is granted by the Authority, and approval shall be based solely upon the safety aspects of the AOC holder's procedures.</p>
Passenger seat belts.	<p><b>47.</b> (1) A passenger occupying a seat or berth shall fasten his safety belt and keep it fastened while the sign is lighted or, in aircraft not equipped with such a sign, whenever instructed by a pilot-in-command.</p> <p>(2) A passenger safety belt shall not be used by more than one occupant during take-off and landing.</p> <p>(3) At each unoccupied seat, the safety belt and shoulder harness, if installed, shall be secured so as not to interfere with crew members in the performance of their duties or with the rapid egress of occupants in an emergency.</p> <p>(4) A person who is not two years of age may be held by an adult who is occupying a seat or berth.</p> <p>(5) A berth, such as a multiple lounge or divan seat, may be occupied by two persons provided it is equipped with an approved safety belt for each person and is used during en route flight only.</p>
Passenger seat backs.	<p><b>48.</b> (1) A pilot-in-command shall not allow the take-off or landing of an aircraft unless each passenger seat back is in the upright position.</p> <p>(2) Exceptions to this requirement shall only be made in accordance with procedures in the air operator certificate holder's operations manual provided the seat back does not obstruct any passenger's access to the aisle or to any emergency exit.</p>
Stowage of food, beverage and passenger service	<p><b>49.</b> A pilot-in-command shall not allow the movement of an aircraft on the surface, take-off or landing-</p> <p>(a) when any food, beverage or tableware furnished by the air operator certificate holder is located at any passenger seat; and</p> <p>(b) unless each food and beverage tray and seat back tray table is in the stowed position.</p>
Securing of items of mass	<p><b>50.</b> A person shall not allow-</p> <p>(a) the take-off or landing of an aircraft unless each item of mass in the passenger cabin is</p>

in passenger compartment	properly secured to prevent it from becoming a hazard during taxi, take-off and landing and during turbulent weather conditions; or (b) an aircraft to move on the surface, take-off or land unless each passenger serving cart is secured in its stowed position.
Unacceptable conduct	<p><b>51.</b> A person on board an aircraft shall not-</p> <p>(a) interfere with a crew member in the performance of that crew members' duties;</p> <p>(b) refuse to fasten his seat belt and keep it fastened while the seat belt sign is lighted;</p> <p>(c) wilfully, recklessly or negligently act or omit to act-</p> <p>(i) so as to endanger an aircraft or persons and property therein; and</p> <p>(ii) so as to cause or permit an aeroplane to endanger any person or property;</p> <p>(d) secrete himself nor secrete cargo on board an aircraft;</p> <p>(e) smoke while the no-smoking sign is lighted;</p> <p>(f) smoke in any aircraft lavatory;</p> <p>(g) tamper with, disable or destroy any smoke detector installed in any aircraft lavatory; or</p> <p>(h) wilfully, recklessly or negligently imperil the safety of an aircraft or any person on board, whether by interference with any crew member, or by tampering with the aircraft or its equipment, or by disorderly conduct by any other means.</p>
Alcohol or drugs	<p><b>52.</b> (1) An officer incharge shall not permit any person who appears to be intoxicated or who demonstrates, by manner or physical indications, that that person is intoxicated to-</p> <p>(a) board an aircraft; or</p> <p>(b) while on board the aircraft be served alcohol.</p> <p>(2) A person shall not:</p> <p>(a) board an aircraft while intoxicated or under the influence of drugs; or</p> <p>(b) while on board the aircraft, be intoxicated or under the influence of drugs.</p>
Carriage of munitions of war	<p><b>53.</b> (1) An aircraft shall not carry munitions of war.</p> <p>(2) A person shall not take or cause to be taken on board an aircraft, or deliver or cause to be delivered for carriage thereon, any goods which that person knows or has reason to believe or suspect to be munitions of war.</p> <p>(3) Without prejudice to sub-regulations (1) and (2), a person shall not carry or have in his charge any weapon on board an aircraft registered in [State], provided that a weapon, not being munitions of war, may be carried as passenger's baggage if it is stowed in the part of the aircraft inaccessible to passengers and, in the case of a firearm, it is not loaded.</p> <p>(4) Nothing in this regulation shall apply to weapons or ammunition taken or carried on board an aircraft if the weapons or ammunition may, under the law of the State in which the aircraft is registered, be lawfully taken or carried on board for the purpose of ensuring the safety of the aircraft or of the persons on board.</p> <p>(5) For the purpose of this regulation, "munitions of war" means such weapons, ammunition, articles, materials or devices as are intended or adapted for use in warfare.</p>
Prohibition against carriage of weapons	<p><b>54.</b> A person shall not, while on board an aircraft being operated in commercial air transport operation, carry a deadly or dangerous weapon, either concealed or unconcealed.</p>

Least-risk bomb location and stowage of weapons	<p><b>55.</b> (1) Specialized means of attenuating and directing the blast shall be provided for use at the least-risk bomb location by the State of design.</p> <p>(2) Where an operator accepts the carriage of weapons removed from passengers, the aeroplane shall stow such weapons in a place which is inaccessible to any other person during flight time.</p>
Passenger compliance with instructions	<p><b>56.</b> A passenger on a commercial air transport operation flight shall comply with instructions given by a crew member in compliance with these Regulations.</p>
Denial of transportation	<p><b>57.</b> An air operator certificate holder may deny transportation to a passenger who-</p> <p>(a) refuses to comply with the instructions regarding exit seating restrictions prescribed by the Authority; or</p> <p>(b) has a handicap that can be physically accommodated only through causing an obstruction to the safe evacuation of other passengers from the aircraft as provided for in Regulation ---.</p>
Passenger information signs	<p><b>58.</b> A PIC of an aircraft shall turn on required passenger information signs during any movement on the surface, for each take-off and each landing, and when otherwise considered to be necessary.</p>
Carriage of Persons Without Compliance with Passenger-Carrying Requirements	<p><b>59.</b> A pilot-in-command or an operator shall not allow a person to be carried without compliance to the passenger carrying requirements unless there is an approved seat with an approved seat belt for that person, and-</p> <p>(a) the seat is so located that the occupant is not in any position to interfere with the flight crew members performing their duties;</p> <p>(b) there is unobstructed access from the approved seat to the flight deck or a regular or emergency exit;</p> <p>(c) there is a means for notifying that person when smoking is prohibited and when seat belts shall be fastened; and</p> <p>(d) that person has been orally briefed by a crew member on the use of emergency equipment and exits.</p>
Evacuation capability	<p><b>60.</b> A PIC or other person assigned by the air operator certificate holder shall ensure that, when passengers are on board the aircraft prior to movement on the surface, at least one floor-level exit provides for egress of passengers through normal or emergency means.</p>
Flight Preparation	<p><b>61.</b> (1) A flight shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is satisfied that:</p> <p>(a) the aeroplane is airworthy and the appropriate certificates (i.e. airworthiness, registration) are on board the aeroplane;</p> <p>(b) the instruments and equipment prescribed in these regulations for the particular type of operation to be undertaken, are installed and are sufficient for the flight;</p> <p>(c) a maintenance release as prescribed in [Civil Aviation (Air Operator Certification and Administration) Regulations] has been issued in respect of the aeroplane;</p> <p>(d) the mass of the aeroplane and center of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected;</p> <p>(e) any load carried is properly distributed and safely secured;</p> <p>(f) a check has been completed indicating that the operating limitations of these regulations can be complied with for the flight to be undertaken; and</p> <p>(g) the requirements in regulation 24 have been complied with.</p> <p>(2) Completed flight preparation forms shall be kept by the operator for a period of three months.</p>

Operational flight planning	<p><b>62.</b> (1) An operational flight plan shall be completed for every intended flight.</p> <p>(2)The operational flight plan shall be approved and signed by the pilot-in-command and, where applicable, signed by the flight operations officer/flight dispatcher, and a copy shall be filed with the operator or a designated agent, or, if these procedures are not possible, it shall be left with the aerodrome authority or on record in a suitable place at the point of departure.</p> <p>(3)The operations manual shall describe the content and use of the operational flight plan.</p>
En-route limitations: all engines operating	<p><b>63.</b> (1) A person shall not commence a flight in a reciprocating engine powered aeroplane used in commercial air transport operation at a weight that does not allow a rate of climb of at least 6.9 V<sub>so</sub> with all engines operating, at an altitude of at least 300 m (1,000 ft) above all terrain and obstructions within ten miles of each side of the intended track.</p> <p>(2) In this regulation the term “6.9 V<sub>so</sub>” means the number of feet per minute obtained by multiplying the aircraft's minimum steady flight speed by 6.9.</p>
En-route limitations: one engine inoperative	<p><b>64.</b> (1) An operator shall ensure that the one engine inoperative enroute net flight path data shown in the aeroplane flight manual, appropriate to the meteorological conditions expected for the flight, complies with either subregulation (2) or (3) at all points along the route.</p> <p>(2) The net flight path shall have a positive gradient at 1500 ft above the aerodrome where the landing is assumed to be made after engine failure, in meteorological conditions requiring the operation of ice protection systems, the effect of their use on the net flight path must be taken into account.</p> <p>(3) The gradient of the net flight path shall be positive at least 1000 ft above all terrain and obstructions along the route within 9.3 km (5 nm) on either side of the intended track.</p> <p>(4) The net flight path shall permit the aeroplane to continue flight from the cruise altitude to an aerodrome where a landing can be made in accordance with regulation 145 as appropriate, the net flight path clearing vertically, by at least 2000 ft, all terrain and obstructions along the route within 9.3 km (5 nm) on either side of the intended track in accordance with the following-</p> <p>(a) the engine is assumed to fail at the most critical point along the route;</p> <p>(b) account is taken of the effects of winds on the flight path;</p> <p>(c) fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used; and</p> <p>(d) the aerodrome where the aeroplane is assumed to land after engine failure shall meet the following criteria-</p> <p>(i) the performance requirements at the expected landing mass are met; and</p> <p>(ii) weather reports or forecasts or any combination thereof, and field condition reports indicate that a safe landing can be accomplished at the estimated time of landing.</p> <p>(5) An operator shall increase the width margins of sub-regulation (4) to 18.5 km (10 nm) if the navigational accuracy does not meet the 95% containment level.</p>
En-route limitations: three or more engines, two engines inoperative	<p><b>65.</b> (1) A person may not take-off an aeroplane used in commercial air transport operation having three or more engines at such a weight where there is no suitable landing aerodrome within 90 minutes at any point along the intended route, with all engines operating at cruising power, unless that aircraft can, in the event of simultaneous power failure of two critical engines at the most critical point along that route, continue to a suitable landing aerodrome while complying with the requirements of sub-regulations (2) up to (6).</p> <p>(2) The two engines inoperative en-route net flight path data shall permit the aeroplane to continue the flight, in the expected meteorological conditions, from the point where two</p>

	<p>engines are assumed to fail simultaneously, to an aerodrome at which it is possible to land and come to a complete stop when using the prescribed procedure for a landing with two engines inoperative.</p> <p>(3) The net flight path referred to in sub-regulation (2) shall clear vertically, by at least 2000 ft all terrain and obstacles along the route within 9.3 km (5 nm) , on either side of the intended track.</p> <p>(4) At altitudes and in meteorological conditions requiring ice protection systems to be operable, the effect of their use on the net flight path data must be taken into account, and if the navigational accuracy does not meet the 95% containment level, an operator must increase the width margin given above to 18.5 km (10 nm).</p> <p>(5) The two engines are assumed to fail at the most critical point of that portion of the route where the aeroplane is more than ninety minutes, at the all engines long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met.</p> <p>(6) The net flight path shall have a positive gradient at 1500 ft above the aerodrome where the landing is assumed to be made after the failure of two engines.</p> <p>(7) Fuel jettisoning in an aeroplane referred to in this regulation is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used.</p> <p>(8) The expected mass of the aeroplane at the point where the two engines are assumed to fail shall not be less than that which would include sufficient fuel to proceed to an aerodrome where the landing is assumed to be made, and to arrive there at least 1500 ft directly over the landing area and thereafter to fly level for fifteen minutes.</p>
Alternate aerodromes-	<p><b>66.</b> (1) A take-off alternate aerodrome shall be selected and specified in the operational flight plan if either the meteorological conditions at the aerodrome of departure are below the operator's established aerodrome landing minima for that operation or if it would not be possible to return to the aerodrome of departure for other reasons.</p> <p>(2) The take-off alternate aerodrome shall be located within the following flight time from the aerodrome of departure:</p> <ul style="list-style-type: none"> <li>(a) for aeroplanes with two engines, one hour of flight time at a one-engine-inoperative cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; or</li> <li>(b) for aeroplanes with three or more engines, two hours of flight time at an all engines operating cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; or</li> <li>(c) for aeroplanes engaged in extended diversion time operations (EDTO) where an alternate aerodrome meeting the distance criteria under paragraphs (a) or (b) is not available, the first available alternate aerodrome located within the distance of the operator's approved maximum diversion time considering the actual take-off mass.</li> </ul> <p>(3) For an aerodrome to be 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 operator's established aerodrome operating minima for that operation.</p> <p>(4) En-route alternate aerodromes, required under regulation 47 for extended diversion time operations (EDTO) by aeroplanes with two turbine engines shall be selected and specified in the operational and air traffic services (ATS) flight plans.</p> <p>(5) For a flight to be conducted in accordance with the instrument flight rules, at least one destination alternate aerodrome shall be selected and specified in the operational and ATS flight plans, unless:</p> <ul style="list-style-type: none"> <li>(a) the duration of the flight from the departure aerodrome, or from the point of in-flight</li> </ul>

	<p>re-planning, to the destination aerodrome is such that, taking into account all meteorological conditions and operational information relevant to the flight, at the estimated time of use, a reasonable certainty exists that:</p> <ul style="list-style-type: none"> <li>(i) the approach and landing may be made under visual meteorological conditions; and</li> <li>(ii) separate runways are usable at the estimated time of use of the destination aerodrome with at least one runway having an operational instrument approach procedure; or</li> </ul> <p>(b) the aerodrome is isolated, operations into isolated aerodromes do not require the selection of a destination alternate aerodrome(s) and shall be planned in accordance with regulation 30(4);</p> <ul style="list-style-type: none"> <li>(i) for each flight into an isolated aerodrome, a point of no return shall be determined; and</li> <li>(ii) a flight to be conducted to an isolated aerodrome shall not be continued past the point of no return unless a current assessment of meteorological conditions, traffic and other operational conditions indicate that a safe landing can be made at the estimated time of use.</li> </ul> <p>(6) Two destination alternate aerodromes shall be selected and specified in the operational and ATS flight plans when, for the destination aerodrome:</p> <ul style="list-style-type: none"> <li>(a) meteorological conditions at the estimated time of use will be below the operator's established aerodrome operating minima for that operation; or</li> <li>(b) meteorological information is not available.</li> </ul> <p>(7) Notwithstanding sub regulations (1),(2) and (3),the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety shall be maintained, approve operational variations to alternate aerodrome selection criteria, and the specific safety risk assessment shall, include:</p> <ul style="list-style-type: none"> <li>(a) capabilities of the operator;</li> <li>(b) overall capability of the aeroplane and its systems;</li> <li>(c) available aerodrome technologies, capabilities and infrastructure;</li> <li>(d) quality and reliability of meteorological information;</li> <li>(e) identified hazards and safety risks associated with each alternate aerodrome variation;</li> <li>(f) specific mitigation measures.</li> </ul>
<p>Maximum distance from an adequate aerodrome for two-engined aeroplanes without an EDTO approval</p>	<p><b>67.</b> (1)Unless specifically granted an extended diversion time operations (EDTO) approval by the Authority, an AOC holder shall not operate a twin engine aeroplane over a route which contains a point further from an adequate aerodrome than, in the case of-</p> <ul style="list-style-type: none"> <li>(a) large, turbine engine powered aeroplanes the distance flown in sixty minutes at the one-engine-inoperative cruise speed determined in accordance with sub-regulation (2) with either- <ul style="list-style-type: none"> <li>(i) a maximum approved passenger seating configuration of twenty or more; or</li> <li>(ii) a maximum take-off mass of 45360 kg or more;</li> </ul> </li> <li>(b) reciprocating engine powered aeroplanes: <ul style="list-style-type: none"> <li>(i) the distance flown in 120 minutes at the one-engine-inoperative cruise speed determined in accordance with sub-regulation (2); or</li> <li>(ii) three hundred nautical miles, whichever is less.</li> </ul> </li> </ul> <p>(2) An AOC holder shall determine a speed for the calculation of the maximum distance to an adequate aerodrome for each two-engined aeroplane type or variant operated, not exceeding V<sub>mo</sub> based upon the true airspeed that the aeroplane can maintain with one-engine-inoperative under the following conditions-</p> <ul style="list-style-type: none"> <li>(a) International Standard Atmosphere;</li> <li>(b) level flight: <ul style="list-style-type: none"> <li>(i) for turbine engine powered aeroplanes at-</li> </ul> </li> </ul>

	<p>(aa) flight level 170; or  (bb) at the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the aeroplane flight manual, whichever is less;  (cc) flight level 170; or  (dd) at the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the aeroplane flight manual, whichever is less;</p> <p>(ii) for propeller driven aeroplanes-  (aa) flight level 80; or  (bb) at the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the aeroplane flight manual, whichever is less;  (iii) maximum continuous thrust or power on the remaining operating engine;  (iv) an aeroplane mass not less than that resulting from:  (aa) take-off at sea-level at maximum take-off mass until the time elapsed since take-off is equal to the applicable threshold prescribed in sub-regulation (1);  (bb) all engines climb to the optimum long range cruise altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in sub-regulation (1); and  (cc) all engines cruise at the long range cruise speed at this altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in sub-regulation (1).</p> <p>(3) An AOC holder shall ensure that the following data, specific to each type or variant, is included in the Operations Manual-  (a) the one-engine-inoperative cruise speed determined in accordance with sub-regulation (2); and  (b) the maximum distance from an adequate aerodrome determined in accordance with sub-regulation (1) and (2).</p> <p>(4) The speeds and altitudes specified in this regulation shall only be used for establishing the maximum distance from an adequate aerodrome.</p>
<p>Extended Diversion Time Operations (EDTO)</p>	<p><b>68.</b> (1) An AOC holder shall not conduct operations beyond the threshold distance determined in accordance with Regulation 27, unless approved to do so by the Authority.</p> <p>(2) Prior to conducting an extended diversion time operation (EDTO) flight, an AOC holder shall ensure that a suitable EDTO en route alternate is available, within either the approved diversion time or a diversion time based on minimum equipment list generated serviceability status of the aeroplane, whichever is shorter.</p>
<p>Requirements for operations beyond 60 minutes to an en-route</p>	<p><b>69.</b> (1) An Operator conducting operations beyond 60 minutes from a point on a route to an en-route alternate aerodrome shall ensure that-</p> <p>(a) for all aeroplanes, en-route alternate aerodromes are identified and the most up-to-date information is provided to the flight crew on identified en-route alternate aerodromes, including operational status and meteorological conditions; and</p>

alternate aerodrome	<p>(b) for aeroplanes with two turbine engines, the most up-to-date information provided to the flight crew indicates that conditions at identified enroute alternate aerodromes will be at or above the operator's established aerodrome operating minima for the operation at the estimated time of use</p> <p>(2) In addition to the requirements in sub regulation (1) and such other safety requirements under these Regulations, an operator shall ensure that overall level of the operational control and flight dispatch procedures, operating procedures and training programmes are taken into account.</p>
Requirements for extended diversion time operations (EDTO)	<p><b>70.</b> (1) Unless the operation has been specifically approved by the Authority, an aeroplane with two or more turbine engines shall not be operated on a route where the diversion time to an en-route alternate aerodrome from any point on the route, calculated in ISA and still-air conditions at the one-engine inoperative cruise speed for aeroplanes with two turbine engines and at the all engines operating cruise speed for aeroplanes with more than two turbine engines, exceeds a threshold time established for such operations by the Authority.</p> <p>(2) The Authority shall approve the maximum diversion time for an operator of a particular aeroplane type engaged in extended diversion time operations.</p> <p>(3) When approving the appropriate maximum diversion time for an operator of a particular aeroplane type engaged in extended diversion time operations, the Authority shall ensure that:</p> <p>(a) for all aeroplanes: the most limiting EDTO significant system time limitation, if any, indicated in the aeroplane flight manual, directly or by reference, and relevant to that particular operation is not exceeded; and</p> <p>(b) for aeroplanes with two turbine engines: the aeroplane is EDTO certified.</p> <p>(4) Notwithstanding the provisions of sub regulation 3(a) the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve operations beyond the time limits of the most time-limited system, and the assessment shall include the:</p> <p>(a) capabilities of the operator;</p> <p>(b) overall reliability of the aeroplane;</p> <p>(c) reliability of each time-limited system;</p> <p>(d) relevant information from the aeroplane manufacturer; and</p> <p>(e) specific mitigation measures.</p> <p>(5) For aeroplanes engaged in EDTO, the additional fuel required shall include the fuel necessary to comply with the EDTO critical fuel scenario as established by the State of the Operator.</p> <p>(6) An operator shall not proceed with a flight beyond the threshold time in accordance with subregulation (1) unless the identified en-route alternate aerodromes have been re-evaluated for availability and the most up-to-date information indicates that, during the estimated time of use, conditions at those aerodromes will be at or above the operator's established aerodrome operating minima for the operation.</p> <p>(7) If any conditions are identified in accordance with subregulation (6) that would preclude a safe approach and landing at that aerodrome during the estimated time of use, an alternative</p>

	<p>course of action shall be determined.</p> <p>(8) The Authority shall, when approving maximum diversion times for aeroplanes with two turbine engines, ensure that the following are taken into account in providing the overall level of safety intended by the provisions of the Civil Aviation (Airworthiness) Regulations:</p> <p>(a) reliability of the propulsion system;</p> <p>(b) airworthiness certification for EDTO of the aeroplane type; and</p> <p>(c) EDTO maintenance programme.</p>
<p>Time capability of cargo compartment fire suppression system</p>	<p><b>71.</b> An Operators shall ensure that, all flights are planned so that the diversion time to an aerodrome where a safe landing could be made does not exceed the cargo compartment fire suppression time capability of the aeroplane, when one is identified in the relevant aeroplane documentation, reduced by an operational safety margin specified by the State of the Operator.</p>
<p>Operation in RNP, MNPS or RVSM airspace</p>	<p><b>72.</b> (1) A person shall not operate an aircraft in defined portions of airspace or on routes where an required navigation performance, (RNP) type has been prescribed, unless-</p> <p>(a) the aircraft is provided with navigation equipment which will enable it to operate in accordance with the prescribed RNP type(s); and</p> <p>(b) he is authorized by the State of the Registry for operations in such airspace.</p> <p>(2) A person shall not operate an aircraft in defined portions of airspace where, based on Regional Air Navigation Agreement, minimum navigation performance specifications (MNPS) are prescribed, without a written authorisation issued by the State of the Operator for MNPS operations.</p> <p>(3) For flights in defined portions of airspace where, minimum navigation performance specifications (MNPS) are prescribed, an aircraft shall be provided with navigation equipment which-</p> <p>(a) continuously provides indications to the flight crew of adherence to or departure from track to the required degree of accuracy at any point along that track; and</p> <p>(b) has been authorized by the State of the Operator for MNPS operations concerned.</p> <p>(4) A person shall not operate an aircraft in defined portions of airspace where, based on Regional Air Navigation Agreement, a reduced vertical separation minimum (RVSM) of 300 m (1 000 ft) is applied between Flight Level 290 and Flight Level 410 inclusive, unless-</p> <p>(a) authorized by the State of the Operator in the airspace concerned and</p> <p>(b) the aircraft is provided with equipment which is capable of</p> <p>(i) indicating to the flight crew the flight level being flown;</p> <p>(ii) automatically maintaining a selected flight level;</p> <p>(iii) providing an alert to the flight crew when a deviation occurs from the selected flight level and the threshold for the alert shall not exceed <math>\pm 90</math> m (300 ft); and</p> <p>(iv) automatically reporting pressure-altitude.</p> <p>(5) Prior to granting the reduced vertical separation minimum (RVSM) approval required in sub-regulation (4), the State of the Operator shall be satisfied that-</p> <p>(a) the vertical navigation performance capability of the aircraft satisfies the requirements of the altimetry system performance for operations in RVSM airspace as prescribed by the Authority;</p>

	<p>(b) the operator has instituted appropriate procedures in respect of continued airworthiness maintenance and repair practices and programmes; and</p> <p>(c) the operator has instituted appropriate flight crew procedures for operations in RVSM airspace.</p>
Reports of height-keeping performance	<p><b>73.</b> (1) The State of Registry that has issued an RVSM approval to an owner/operator shall establish a requirement which ensures that a minimum of two aeroplanes of each aircraft type grouping of the owner/operator have their height-keeping performance monitored, at least once every two years or within intervals of 1 000 flight hours per aeroplane, whichever period is longer.</p> <p>(2) If an owner or operator aircraft type grouping consists of a single aeroplane, monitoring of that aeroplane shall be accomplished within the specified period.</p>
Electronic navigation data management	<p><b>74.</b> (1) An operator shall not employ electronic navigation data products that have been processed for application in the air and on the ground unless the State of the Operator has approved the operator's procedures or unless the process applied and the products delivered meets acceptable standards of integrity and such products are compatible with the equipment to which they are intended to be used.</p> <p>(2) The State of the Operator shall ensure that the operator continues to monitor both process and products.</p> <p>(3) An operator shall implement procedures that ensure timely distribution and insertion of current and unaltered electronic navigation data to all aircraft that requires it.</p>
Compliance with visual and electronic glide slopes	<p><b>75.</b> (1) A PIC of an aircraft approaching to land on a runway served by a visual approach slope indicator or precision approach path indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.</p> <p>(2) A PIC of a turbojet, turbofan, or large aircraft approaching to land on a runway served by an instrument landing system shall fly that aircraft at or above the glide slope from the point of interception of the glide slope to the decision height.</p>
Restriction or suspension of operations: commercial air transport	<p><b>76.</b> Where a PIC or an AOC holder knows of conditions, including aerodrome and runway conditions, that are a hazard to safe operations, that PIC or AOC holder shall restrict or suspend all commercial air transport operations to such aerodromes and runways as necessary until those conditions are corrected or have improved.</p>
Continuation of flight when destination aerodrome is temporarily restricted: commercial air transport	<p><b>77.</b> A PIC shall not allow a flight to continue toward any aerodrome of intended landing where commercial air transport operations is restricted or suspended, unless-</p> <p>(a) in the opinion of the PIC, the conditions that are a hazard to safe operations may reasonably be expected to be corrected or have improved by the estimated time of arrival; or</p> <p>(b) there is no safer procedure.</p>
Meteorological conditions-- VFR Flights	<p><b>78.</b> 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 under VFR will, at the appropriate time, be such as to enable compliance with VFR.</p>
Meteorological	<p><b>79.</b> (1) A flight to be conducted in accordance with the instrument flight rules shall not:</p>

<p>conditions-- IFR Flights</p>	<p>(a) take off from the departure aerodrome unless the meteorological conditions, at the time of use, are at or above the operator's established aerodrome operating minima for that operation; and</p> <p>(b) take off or continue beyond the point of in-flight re-planning unless at the aerodrome of intended landing or at each alternate aerodrome to be selected in compliance with Regulation 25, current meteorological reports or a combination of current reports and forecasts indicate that the meteorological conditions will be, at the estimated time of use, at or above the operator's established aerodrome operating minima for that operation.</p>
<p>Visibility/ cloud base</p>	<p><b>80.</b> (1) 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 aerodrome operating minima 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 aerodrome,</p> <p>(2)The Authority shall approve a margin of time established by the operator for the estimated time of use of an aerodrome.</p>
<p>Icing conditions</p>	<p><b>81.</b> (1) A flight to be operated in known or expected icing conditions shall not be commenced unless the aeroplane is certificated and equipped to cope with such conditions.</p> <p>(2) A flight to be planned or expected to operate in suspected or known ground icing conditions shall not take off unless the aeroplane has been inspected for icing and, if necessary, has been given appropriate de-icing or anti-icing treatment.</p> <p>(3) Accumulation of ice or other naturally occurring contaminants shall be removed so that the aeroplane is kept in an airworthy condition prior to take-off.</p>
<p>Fuel requirements</p>	<p><b>82.</b> (1) An aeroplane shall carry a sufficient amount of usable fuel to complete the planned flight safely and to allow for deviations from the planned operation.</p> <p>(2) The amount of usable fuel to be carried shall, as a minimum, be based on:</p> <p>(a) the following data:</p> <ul style="list-style-type: none"> <li>i. current aeroplane-specific data derived from a fuel consumption monitoring system, if available; or</li> <li>ii. if current aeroplane-specific data are not available, data provided by the aeroplane manufacturer; and</li> </ul> <p>(b) the operating conditions for the planned flight including:</p> <ul style="list-style-type: none"> <li>i. anticipated aeroplane mass;</li> <li>ii. current meteorological reports or a combination of current reports and forecasts;</li> <li>iii. air traffic services procedures, restrictions and anticipated delays; and</li> <li>iv. the effects of deferred maintenance items and configuration deviations.</li> </ul> <p>(3) The pre-flight calculation of usable fuel required shall include:</p> <ul style="list-style-type: none"> <li>(a) taxi fuel, which shall be the amount of fuel expected to be consumed before take-off, taking into account local conditions at the departure aerodrome and auxiliary power unit (APU) fuel consumption;</li> <li>(b) trip fuel, which shall be the amount of fuel required to enable the aeroplane to fly from take-off, or the point of inflight re-planning, until landing at the destination aerodrome taking into account the operating conditions of sub regulation (2).</li> <li>(c) contingency fuel, which shall be the amount of fuel required to compensate for unforeseen factors and it shall be five per cent of the planned trip fuel or of the fuel required from the point of in-flight re-planning based on the consumption rate used to plan the trip fuel but, in any case, shall not be lower than the amount required to fly for five minutes at holding speed at 450 m (1 500 ft) above the destination aerodrome in standard conditions;</li> <li>(d) destination alternate fuel, shall be: <ul style="list-style-type: none"> <li>i. where a destination alternate aerodrome is required, the amount of fuel required to enable the aeroplane to:</li> </ul> </li> </ul>

	<p>(aa) perform a missed approach at the destination aerodrome;  (bb) climb to the expected cruising altitude;  (cc) fly the expected routing;  (dd) descend to the point where the expected approach is initiated; and  (ee) conduct the approach and landing at the destination alternate aerodrome;</p> <p>or</p> <p>(e) where two destination alternate aerodromes are required, the amount of fuel, as calculated in sub regulation (3)(d) (i), required to enable the aeroplane to proceed to the destination alternate aerodrome which requires the greater amount of alternate fuel; or</p> <p>(f) where a flight is operated without a destination alternate aerodrome, the amount of fuel required to enable the aeroplane to fly for 15 minutes at holding speed at 450 m (1 500 ft) above destination aerodrome elevation in standard conditions; or</p> <p>(g) where the aerodrome of intended landing is an isolated aerodrome:  (aa) for a reciprocating engine aeroplane, the amount of fuel required to fly for 45 minutes plus 15 per cent of the flight time planned to be spent at cruising level, including final reserve fuel, or two hours, whichever is less; or  (bb) for a turbine-engine aeroplane, the amount of fuel required to fly for two hours at normal cruise consumption above the destination aerodrome, including final reserve fuel;</p> <p>(h) final reserve fuel, which shall be the amount of fuel calculated using the estimated mass on arrival at the destination alternate aerodrome, or the destination aerodrome when no destination alternate aerodrome is required:  (aa) for a reciprocating engine aeroplane, the amount of fuel required to fly for 45 minutes, under speed and altitude conditions specified by the Authority; or  (bb) for a turbine-engine aeroplane, the amount of fuel required to fly for 30 minutes at holding speed at 450 m (1 500 ft) above aerodrome elevation in standard conditions;</p> <p>(i) additional fuel, which shall be the supplementary amount of fuel required if the minimum fuel calculated in accordance with Sub regulation 3 is not sufficient to:    (aa) allow the aeroplane to descend as necessary and proceed to an alternate aerodrome in the event of engine failure or loss of pressurization, whichever requires the greater amount of fuel based on the assumption that such a failure occurs at the most critical point along the route;  (bb) fly for 15 minutes at holding speed at 450 m (1 500 ft) above aerodrome elevation in standard conditions; and</p> <p>(j) make an approach and landing;</p> <p>(k) allow an aeroplane engaged in EDTO to comply with the EDTO critical fuel scenario as established by the Authority;</p> <p>(l) meet additional requirements not covered above;</p>
	<p>(3) Operators shall determine one final reserve fuel value for each aeroplane type and variant in their fleet rounded up to an easily recalled figure.</p>
	<p>(4) A flight shall not commence unless the usable fuel on board meets the requirements in sub regulation 3 if required and shall not continue from the point of in-flight re-planning unless the usable fuel on board meets the requirements in Sub regulation 3 if required.</p>
	<p>(5) Notwithstanding the provisions in sub regulation 3, the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve variations to the pre-flight fuel calculation of taxi fuel, trip fuel, contingency fuel, destination alternate fuel, and additional fuel.</p>
	<p>(6) The specific safety risk assessment shall include</p> <p>(a) flight fuel calculations;</p> <p>(b) capabilities of the operator to include:</p> <p>i. a data-driven method that includes a fuel consumption monitoring Programme;</p>

	<p>and</p> <p>ii. the advanced use of alternate aerodromes; and</p> <p>(c) Specific mitigation measures.</p> <p>(7) 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.</p>												
In-flight fuel management	<p><b>83.</b> (1) The operator shall establish policies and procedures, approved by the Authority, to ensure that inflight fuel checks and fuel management are performed.</p> <p>(2) The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining upon landing.</p> <p>(3) The pilot-in-command shall request delay information from ATC when unanticipated circumstances may result in landing at the destination aerodrome with less than the final reserve fuel plus any fuel required to proceed to an alternate aerodrome or the fuel required to operate to an isolated aerodrome.</p> <p>(4) The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than the planned final reserve fuel.</p> <p>(5) The pilot-in-command shall declare a situation of fuel emergency by broadcasting MAYDAY MAYDAYMAYDAY FUEL, when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.</p>												
Refueling with passengers on board	<p><b>84.</b> (1) An aeroplane shall not be refueled when passengers are embarking, on board or disembarking unless it is properly attended by qualified personnel ready to initiate and direct an evacuation of the aeroplane by the most practical and expeditious means available.</p> <p>(2) When refueling with passengers embarking, on board or disembarking, two-way communication shall be maintained by the aero plane's inter-communication system or other suitable means between the ground crew supervising the refueling and the qualified personnel on board the aeroplane</p> <p>(3) Additional precautions are required when refueling with fuels other than aviation kerosene or when refueling results in a mixture of aviation kerosene with other aviation turbine fuels, or when an open line is used.</p>												
Oxygen supply	<p><b>85.</b> (1) The approximate altitudes in the Standard Atmosphere corresponding to the values of absolute pressure used in the text are as follows:</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">Absolute pressure</th> <th style="text-align: left;">Meters</th> <th style="text-align: left;">Feet</th> </tr> </thead> <tbody> <tr> <td>700 hPa</td> <td>3 000</td> <td>10 000</td> </tr> <tr> <td>620 hPa</td> <td>4 000</td> <td>13 000</td> </tr> <tr> <td>376 hPa</td> <td>7 600</td> <td>25 000</td> </tr> </tbody> </table> <p>(2) A flight to be operated at flight altitudes at which the atmospheric pressure in personnel compartments is less than 700 hPa shall not be commenced unless sufficient stored breathing oxygen is carried to supply:</p> <p>(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</p> <p>(b) the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa.</p> <p>(3) A flight to be operated with a pressurized aeroplane 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.</p>	Absolute pressure	Meters	Feet	700 hPa	3 000	10 000	620 hPa	4 000	13 000	376 hPa	7 600	25 000
Absolute pressure	Meters	Feet											
700 hPa	3 000	10 000											
620 hPa	4 000	13 000											
376 hPa	7 600	25 000											

	(4) where an aeroplane is operated at flight altitudes at which the atmospheric pressure is less than 376 hPa, or which, if operated at flight altitudes at which the atmospheric pressure is more than 376 hPa and cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hPa, there shall be no less than a 10-minute supply for the occupants of the passenger compartment.
Time capability of cargo compartment fire suppression system	<b>86.</b> All flights shall be planned so that the diversion time to an aerodrome where a safe landing could be made does not exceed the cargo compartment fire suppression time capability of the aeroplane, when one is identified in the relevant aeroplane documentation, reduced by an operational safety margin specified by the Authority.
In-flight procedures -Aerodrome operating minima	<b>87.</b> (1) A flight shall not be continued towards the aerodrome of intended landing, unless the latest available information indicates that at the expected time of arrival, a landing can be effected at that aerodrome or at least one destination alternate aerodrome, in compliance with Regulation 18. (2) An instrument approach shall not be continued below 300 m (1 000 ft) above the aerodrome elevation or into the final approach segment unless the reported visibility or controlling RVR is at or above the aerodrome operating minima (3) If, after entering the final approach segment or after descending below 300 m (1 000 ft) above the aerodrome elevation, the reported visibility or controlling RVR falls below the specified minimum, the approach may be continued to DA/H or MDA/H. In any case, an aeroplane shall not continue its approach-to-land at any aerodrome beyond a point at which the limits of the operating minima specified for that aerodrome would be infringed.
Meteorological observations	<b>88.</b> [As of 5 November 2020], The pilot-in-command shall report the runway braking action special air-report (AIREP) when the runway braking action encountered is not as good as reported.
Hazardous flight conditions	<b>89.</b> (1) Hazardous flight conditions encountered, other than those associated with meteorological conditions, shall be reported to the appropriate aeronautical station as soon as possible. (2) The reports so rendered shall give such details as may be pertinent to the safety of other aircraft.
Flight crew members at duty stations	<b>90.</b> (1) All flight crew members required to be on flight deck duty shall be at their stations during take-off and landing. (2) During the enroute face of 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 aeroplane or for physiological needs. (3) All flight crew members shall keep their seat belts fastened when at their stations. (4) Any 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 harnesses 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	<b>91.</b> (1) All flight crew members, when engaged in performing duties essential to the safe operation of an aeroplane inflight, shall use breathing oxygen continuously whenever the circumstances prevail for which its supply has been required in Regulation 33. (2) All flight crew members of pressurized aeroplanes operating above an altitude where the atmospheric pressure is less than 376 hPa shall have available at the flight duty station a quick-donning type of oxygen mask which will readily supply oxygen upon demand.
Safeguarding of	<b>92.</b> (1) Cabin crew shall be safeguarded so as to ensure reasonable probability of their

cabin crew and passengers in pressurized aeroplanes in the event of loss of pressurization	retaining consciousness during any emergency descent which may be necessary in the event of loss of pressurization and, in addition, they should have such means of protection as will enable them to administer first aid to passengers during stabilized flight following the emergency.
	(2) Passengers should be safeguarded by such devices or operational procedures as will ensure reasonable probability of their surviving the effects of hypoxia in the event of loss of pressurization.
In-flight operational instructions	<b>93.</b> Operational instructions involving a change in the ATS flight plan shall, when practicable, be coordinated with the appropriate ATS unit before transmission to the aeroplane.
Instrument flight procedures.	<b>94.</b> (1) The Authority shall approve and promulgate One or more instrument approach procedures designed to support instrument approach operations in which the aerodrome is located to serve each instrument runway or aerodrome utilized for instrument flight operations
	(2) All aeroplanes operated in accordance with instrument flight rules shall comply with the instrument flight procedures approved by the Authority in which the aerodrome is located.
Instrument flight rules take-off minima	<b>95.</b> Unless otherwise authorised by the Authority, no pilot operating an aircraft in commercial air transport operations shall accept a clearance to take off from an aerodrome under Instrument flight rules unless weather conditions are at or above- (a) for aircraft, having two engines or less: one thousand five hundred metres; (b) for aircraft having more than two engines, eight hundred metres.
Instrument approach procedures and Instrument flight rules landing minima	<b>96.</b> (1) A person shall not make an instrument approach at an airport except in accordance with Instrument flight rules weather minima and instrument approach procedures set out in the AOC holder's operations specifications. (2) One or more instrument approach procedures designed in accordance with the classification of instrument approach and landing operations shall be approved and promulgated by the Authority in which the aerodrome is located to serve each instrument runway or aerodrome utilized for instrument flight operations. (3) All aeroplanes operated in accordance with instrument flight rules shall comply with the instrument flight procedures approved by the Authority in which the aerodrome is located.
Commencing an instrument approach	<b>97.</b> (1) A pilot shall not continue an approach past the final approach fix, or where a final approach fix is not used, begin the final approach segment of an instrument approach procedure, at any aerodrome unless- (a) a source approved by the Authority issues a weather report for that aerodrome; (b) the latest weather report for that aerodrome indicates the visibility to be equal to or more than the visibility minima prescribed for that procedure; and (c) For instrument approach and landing operations, 800 m visibility should not be authorized unless RVR information is provided. (2) Where a pilot begins the final approach segment of an instrument approach procedure and subsequently receives a weather report indicating below minimum conditions, the pilot may continue the approach to decision height or minimum descent altitude. (3) For the purpose of this regulation, the final approach segment begins at the final approach fix or facility prescribed in the instrument approach procedure. (4) For the purpose of this regulation, “the final approach segment” means the segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

	<p>(5) When a final approach fix is not prescribed for a procedure that includes a procedure turn, the final approach segment begins at the point where the procedure turn is completed and the aircraft is established inbound toward the aerodrome on the final approach course within the distance prescribed in the procedure.</p> <p>(6) One or more instrument approach procedures to serve each final approach and take-off area or heliport utilized for instrument flight 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.</p>
Threshold crossing height for precision approaches	<p><b>98.</b> An operator shall establish operational procedures designed to ensure that aircraft being used to conduct precision approaches crosses the threshold by a safe margin with the aircraft in the landing configuration and altitude.</p>
Operation below decision height or minimum descent altitude	<p>X.-(1) Where a decision height or minimum descent altitude is applicable, a pilot shall not operate an aircraft at any aerodrome below the authorised minimum descent altitude, or continue an approach below the authorised decision height unless-</p> <p>(a) the aircraft is continuously in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal manoeuvres;</p> <p>(b) a descent rate shall allow touchdown to occur within the touchdown zone of the runway of intended landing;</p> <p>(c) the flight visibility is not less than the visibility prescribed in the standard instrument approach being used; and</p> <p>(d) at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:</p> <p>(i) the approach light system, except that the pilot shall not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable-</p> <p>(ii) threshold or the threshold markings;</p> <p>(iii) threshold lights;</p> <p>(iv) the runway end identifier lights;</p> <p>(v) the visual approach slope indicator system; or precision approach path indicator</p> <p>(vi) the touchdown zone or touchdown zone markings;</p> <p>(vii) the touchdown zone lights;</p> <p>(viii) the runway or runway markings; or</p> <p>(ix) the runway lights.</p> <p>(2) The visual references set out in sub-regulation (1)(d) shall not apply to Category II and III operations.</p> <p>(3) The required visual references under Category II and III operations shall be provided in the AOC holder's operations specifications or a special authorisation prescribed by the Authority.</p>
Landing during instrument meteorological conditions	<p><b>99.</b> A pilot operating an aircraft shall not land that aircraft when the flight visibility is less than the visibility prescribed by the Authority in the standard instrument approach procedure being used.</p>
Execution of a missed approach procedure	<p><b>100.</b> A pilot operating an aircraft shall immediately execute an appropriate missed approach procedure when either of the following conditions exist-</p> <p>(a) whenever the required visual reference criteria is not met in the following situations-</p> <p>(i) when the aircraft is being operated below minimum descent altitude (MDA); or</p> <p>(ii) upon arrival at the missed approach point, including a DH where a DH is specified and its</p>

	<p>use is required, and at any time after that until touchdown; or</p> <p>(b) whenever an identifiable part of the aerodrome is not distinctly visible to the pilot during a circling manoeuvre at or above MDA, unless the inability to see an identifiable part of the aerodrome results only from a normal bank of the aircraft during the circling approach.</p>
<p>Minimum altitudes for use of an autopilot</p>	<p><b>101.</b>(1) Except as provided in sub-regulations (2),(3) and (4) , a person shall not use an autopilot en route, including climb and descent, at an altitude above the terrain that is less than twice the maximum altitude loss specified in the aircraft flight manual for malfunction of the autopilot under cruise conditions, or less than 500 feet, whichever is higher.</p> <p>(2) When using an instrument approach facility, a person shall not use an autopilot at an altitude above the terrain that is less than twice the maximum altitude loss specified in the aircraft flight manual for a malfunction of the autopilot under approach conditions, or less than 50 feet below the approved minimum descent altitude or decision height for the facility, whichever is higher, except-</p> <p>(a) when reported weather conditions are less than the basic visual flight rules (VFR) weather conditions as specified in the Civil Aviation (Rules of the Air and Air Traffic Control) Regulations, a person shall not use an autopilot with an approach coupler for instrument landing system approaches at an altitude above the terrain that is less than 50 feet higher than the maximum altitude loss specified in the aircraft flight manual for the malfunction of the autopilot with approach coupler under approach conditions; and</p> <p>(b) when reported weather conditions are equal to or better than the basic VFR minima as specified in the Civil Aviation (Rules of the Air and Air Traffic Control) Regulations, a person shall not use an autopilot with an approach coupler for instrument landing system approaches at an altitude above the terrain that is less than the maximum altitude loss specified in the aircraft flight manual for the malfunction of the autopilot with approach coupler under approach conditions, or 50 feet, whichever is higher.</p> <p>(3) Notwithstanding sub-regulation (1) or (2) , the Authority shall issue operation specifications to allow the use, to touchdown, of an approved flight control guidance system with automatic capability, in any case in which-</p> <p>(a) the system does not contain any altitude loss (above zero) specified in the aircraft flight manual for malfunction of the autopilot with approach coupler; and</p> <p>(b) the Authority finds that the use of the system to touchdown will not otherwise affect the safety standards required by this regulation.</p> <p>(4) Notwithstanding sub-regulation (1), the Authority shall issue operation specifications to allow the use of an approved autopilot system with automatic capability below the altitude specified in sub-regulation (1) during the take-off and initial climb phase of flight provided-</p> <p>(a) the aircraft flight manual specifies a minimum altitude engagement certification restriction;</p> <p>(b) the system is not engaged prior to the minimum engagement certification restriction specified in the aircraft flight manual or an altitude specified by the Authority, whichever is higher; and</p> <p>(c) the Authority finds that the use of the system will not otherwise affect the safety standards required by this regulation.</p> <p>(5) Unless otherwise specified in an air traffic control instruction, to avoid unnecessary airborne collision avoidance system (ACAS II) resolution advisories in aircraft at or approaching adjacent altitudes or flight levels, operators shall specify procedures by which an aeroplane climbing or descending to an assigned altitude or flight level, especially with an autopilot engaged, may do so at a rate less than 8 m/sec or 1 500 ft/min (depending on the instrumentation available) throughout the last 300 m (1 000 ft) of climb or descent to the</p>

	assigned level when the pilot is made aware of another aircraft at or approaching an adjacent altitude or flight level.
Minimum flight altitudes	<p><b>102.</b>(1) An 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, provided that minimum flight altitudes shall not be less than those established by that State.</p> <p>(2) An operator shall specify the procedure 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 and shall include this procedure in the operations manual.</p> <p>(3) The minimum flight altitudes determined in accordance with sub regulation (2) shall not be lower than specified in Civil Aviation (Rules of Air) Regulations.</p> <p>(4) The operator shall submit to the Authority for approval such method only after careful consideration of the probable effects of the following factors on the safety of the operation in question-</p> <p>(a) the accuracy and reliability with which the position of the aeroplane can be determined;</p> <p>(b) the inaccuracies in the indications of the altimeters used;</p> <p>(c) the characteristics of the terrain;</p> <p>(d) the probability of encountering unfavourable meteorological conditions;</p> <p>(e) possible inaccuracies in aeronautical charts; and</p> <p>(f) airspace restrictions.</p>
Receiver failure	<p><b>103.</b>(1) Where an aircraft radio station is unable to establish communication due to receiver failure, that aircraft shall transmit-</p> <p>(a) reports at the scheduled times, or positions, on the frequency in use, preceded by the phrase “TRANSMITTING BLIND DUE TO RECEIVER FAILURE”; and</p> <p>(b) the intended message, following this by a complete repetition, during this procedure, the aircraft shall also advise the time of its next intended transmission.</p> <p>(2) An aircraft which is provided with air traffic control service or advisory service shall, in addition to complying with sub-regulation (1), transmit information regarding the intention of the pilot-in-command (PIC) with respect to the continuation of the flight of the aircraft.</p> <p>(3) Where a PIC is unable to establish communication due to airborne equipment failure he shall, when the aircraft is so equipped, select the appropriate secondary surveillance radar (SSR) code 7600 to indicate radio failure</p>
Aeroplane operating procedures for noise abatement.	<p><b>104.</b>(1) Aeroplane operating procedures for noise abatement should comply with the provisions of [PANS-OPS (Doc 8168), Volume I.]</p> <p>(2) Noise abatement procedures specified by the operator for any one aeroplane type should be the same for all aerodromes</p>
Aeroplane operating procedures for rates of climb, descent and Landing Performance	<p><b>105.</b>(1) Unless otherwise specified in an air traffic control instruction, to avoid unnecessary airborne collision avoidance system (ACAS II) resolution advisories in aircraft at or approaching adjacent altitudes or flight levels, operators should specify procedures by which an aeroplane climbing or descending to an assigned altitude or flight level, especially with an autopilot engaged, may do so at a rate less than 8 m/sec or 1 500 ft/min (depending on the instrumentation available) throughout the last 300 m (1 000 ft) of climb or descent to the assigned level when the pilot is made aware of another aircraft at or approaching an adjacent altitude or flight level.</p> <p>(2) An approach to land shall not be continued below 300 m (1 000 ft) above aerodrome elevation unless the pilot-in-command is satisfied that, with the runway surface condition information available, the aeroplane performance information indicates that a safe landing can be made.</p>
Duties of Pilot-	<b>106.</b> (1) The pilot-in-command shall be responsible for the safety of all crew members,

In-Command	<p>passengers and cargo on board when the doors are closed.</p> <p>(2) The pilot-in-command shall also be responsible for the operation and safety of the aeroplane from the moment the aeroplane is ready to move for the purpose of taking off until the moment it finally comes to rest at the end of the flight and the engine(s) used as primary propulsion units are shut down.</p> <p>(3) The pilot-in-command shall ensure that the checklists specified in Regulation 16 are complied with in detail.</p> <p>(4) The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the aeroplane, resulting in serious injury or death of any person or substantial damage to the aeroplane or property.</p> <p>(5) The pilot-in-command shall be responsible for reporting all known or suspected defects in the aeroplane, to the operator, at the termination of the flight.</p> <p>(6) submit a report to the Authority of any accident which occurred while that PIC was responsible for the flight.</p>
Duties of flight operations officer/flight Dispatcher	<p><b>107.</b>(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:</p> <ul style="list-style-type: none"> <li>a) assist the pilot-in-command in flight preparation and provide the relevant information;</li> <li>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;</li> <li>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; and</li> <li>d) notify the appropriate ATS unit when the position of the aeroplane cannot be determined by an aircraft tracking capability, and attempts to establish communication are unsuccessful.</li> </ul> <p>(2) In the event of an emergency, a flight operations officer/flight dispatcher shall:</p> <ul style="list-style-type: none"> <li>a) initiate such procedures as outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and</li> <li>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.</li> </ul>
Additional requirements for operations by aeroplanes with turbine engines beyond 60 minutes to an en-route alternate aerodrome including extended diversion time operations (EDTO)	<p><b>108.</b>(1) Operators conducting operations beyond 60 minutes from a point on a route to an en-route alternate aerodrome shall ensure that:</p> <ul style="list-style-type: none"> <li>a) for all aeroplanes: <ul style="list-style-type: none"> <li>i. en-route alternate aerodromes are identified; and</li> <li>ii. the most up-to-date information is provided to the flight crew on identified en-route alternate aerodromes, including operational status and meteorological conditions;</li> </ul> </li> <li>b) for aeroplanes with two turbine engines, the most up-to-date information provided to the flight crew indicates that conditions at identified en-route alternate aerodromes will be at or above the operator's established aerodrome operating minima for the operation at the estimated time of use.</li> </ul> <p>(2) Save as provided in sub regulation (1), all operators shall ensure that the following are taken into account and provide the overall level of safety intended by the provisions of these Regulations:</p> <ul style="list-style-type: none"> <li>a) operational control and flight dispatch procedures;</li> <li>b) operating procedures; and</li> <li>c) training programs.</li> </ul> <p>(3), an aeroplane with two or more turbine engines shall not be operated, unless the operation has been specifically approved by the Authority, on a route where the diversion time to an en-route alternate aerodrome from any point on the route, calculated in ISA and still-air</p>

	<p>conditions at the one-engine-inoperative cruise speed for aeroplanes with two turbine engines and at the all engines operating cruise speed for aeroplanes with more than two turbine engines, exceeds a threshold time established for such operations by that Authority.</p> <p>(4) The maximum diversion time for the operator of a particular aeroplane type engaged in extended diversion time operations shall be approved by the Authority.</p> <p>(5) When approving the appropriate maximum diversion time for the operator of a particular aeroplane type engaged in extended diversion time operations, the Authority shall ensure that:</p> <ol style="list-style-type: none"> <li>a) for all aeroplanes: the most limiting EDTO significant system time limitation, if any, indicated in the aeroplane flight manual (directly or by reference) and relevant to that particular operation is not exceeded; and</li> <li>b) for aeroplanes with two turbine engines: the aeroplane is EDTO certified.</li> </ol> <p>(6) Notwithstanding the provisions of sub regulation (5)(a), the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve operations beyond the time limits of the most time-limited system.</p> <p>(7) The specific safety risk assessment as provided in sub regulation (6) shall include:</p> <ol style="list-style-type: none"> <li>a) capabilities of the operator;</li> <li>b) overall reliability of the aeroplane;</li> <li>c) reliability of each time-limited system;</li> <li>d) relevant information from the aeroplane manufacturer; and</li> <li>e) specific mitigation measures.</li> </ol> <p>(8) For aeroplanes engaged in EDTO, the additional fuel required under regulation 30 shall include the fuel necessary to comply with the EDTO critical fuel scenario as established by the Authority;</p> <p>(9) A flight shall not proceed beyond the threshold time in accordance with sub regulation (3) unless the identified en-route alternate aerodromes have been re-evaluated for availability and the most up-to-date information indicates that, during the estimated time of use, conditions at those aerodromes will be at or above the operator's established aerodrome operating minima for the operation.</p> <p>(10) where any conditions are identified that would preclude a safe approach and landing at that aerodrome during the estimated time of use, an alternative course of action shall be determined by the Operator.</p> <p>(11) The Authority shall, when approving maximum diversion times for aeroplanes with two turbine engines, ensure that the following are taken into account in providing the overall level of safety intended by the provisions of the Civil Aviation(Airworthiness) Regulations:</p> <ol style="list-style-type: none"> <li>a) reliability of the propulsion system;</li> <li>b) airworthiness certification for EDTO of the aeroplane type; and</li> <li>c) EDTO maintenance Programme.</li> </ol> <p>(12) An aeroplane type with two turbine engines which, prior to 25 March 1986, was authorized and operating on a route where the flight time at one-engine-inoperative cruise speed to a non-route alternate aerodrome exceeded the threshold time established for such operations in accordance with sub regulation (3) shall give consideration to permitting such an operation to continue on that route after that date.</p>
Carry-on baggage	<b>109.</b> The operator shall ensure that all baggage carried onto an aeroplane and taken into the passenger cabin is adequately and securely stowed.
Additional requirements for single pilot operations under the	<p><b>110.</b>(1) An aeroplane shall not be operated under IFR or at night by a single pilot unless approved by the Authority.</p> <p>(2) An aeroplane shall not be operated under IFR or at night by a single pilot unless:</p> <ol style="list-style-type: none"> <li>a) the flight manual does not require a flight crew of more than one;</li> <li>b) the aeroplane is propeller-driven;</li> </ol>

instrument flight rules (IFR) or at night	<ul style="list-style-type: none"> <li>c) the maximum approved passenger seating configuration is not more than nine;</li> <li>d) the maximum certificated take-off mass does not exceed 5 700 kg;</li> <li>e) the aeroplane is equipped as described in the Civil Aviation (Instruments and Equipment) Regulations; and</li> <li>f) the pilot-in-command has satisfied requirements of experience, training, checking and recency described in Regulation 83 .</li> </ul>
Fatigue management	<p><b>111.</b>(1) The Authority shall establish regulations for the purpose of managing fatigue based upon scientific principles, knowledge and operational experience with the aim of ensuring that flight and cabin crew members are performing at an adequate level of alertness.</p> <p>(2) The Authority shall establish:</p> <ul style="list-style-type: none"> <li>a) regulations for flight time, flight duty period, duty period and rest period limitations;</li> <li>b) where authorizing the operator to use a Fatigue Risk Management System (FRMS) to manage fatigue, FRMS regulations</li> </ul> <p>(3) The Authority shall require that the operator, in compliance with 50(1) and for the purposes of managing its fatigue-related safety risks, establish either:</p> <ul style="list-style-type: none"> <li>a) flight time, flight duty period, duty period and rest period limitations that are within the prescriptive fatigue management regulations established by the Authority; or</li> <li>b) a Fatigue Risk Management System (FRMS) in compliance with 50(9) for all operations; or</li> <li>c) an FRMS in compliance with 50(9) for part of its operations and the requirements of 50(3) a) for the remainder of its operations.</li> </ul> <p>4) Where the operator adopts prescriptive fatigue management regulations for part or all of its operations, the Authority may approve, in exceptional circumstances, variations to these regulations on the basis of a risk assessment provided by the operator.</p> <p>5) Approved variations shall provide a level of safety equivalent to, or better than that achieved through the prescriptive fatigue management regulations.</p> <p>6) The Authority shall approve the operator’s FRMS before it may take the place of any or all of the prescriptive fatigue management regulations.</p> <p>7) An approved FRMS shall provide a level of safety equivalent to, or better than, the prescriptive fatigue management regulations.</p> <p>8) States that approve the operator’s FRMS shall establish a process to ensure that an FRMS provides a level of safety equivalent to, or better than, the prescriptive fatigue management regulations.</p> <p>9) As part of this process, the Authority shall:</p> <ul style="list-style-type: none"> <li>a) require that the operator establish maximum values for flight times and/or flight duty periods(s) and duty period(s), and minimum values for rest periods. These values shall be based upon scientific principles and knowledge, subject to safety assurance processes, and acceptable to the Authority;</li> <li>b) mandate a decrease in maximum values and an increase in minimum values in the event that the operator’s data indicates these values are too high or too low, respectively; and</li> <li>c) approve any increase in maximum values or decrease in minimum values only after evaluating the operator’s justification for such changes, based on accumulated FRMS experience and fatigue-related data.</li> </ul> <p>10) Where the operator implements an FRMS to manage fatigue-related safety risks, the operator shall, as a minimum:</p> <ul style="list-style-type: none"> <li>a) incorporate scientific principles and knowledge within the FRMS;</li> <li>b) identify fatigue-related safety hazards and the resulting risks on an ongoing basis;</li> <li>c) ensure that remedial actions, necessary to effectively mitigate the risks associated with the hazards, are implemented promptly;</li> <li>d) provide for continuous monitoring and regular assessment of the mitigation of fatigue risks achieved by such actions; and</li> <li>e) provide for continuous improvement to the overall performance of the FRMS.</li> </ul> <p>11) The Authority shall require that, where the operator has an FRMS, it is integrated with the operator’s SMS.</p>

	12) The operator shall maintain records for all its flight and cabin crew members of flight time, flight duty periods, duty periods, and rest periods for a period of time specified by the Authority.]
PART IV- AEROPLANE PERFORMANCE OPERATING LIMITATIONS	
General	<b>112.</b> (1) Aeroplanes shall be operated in accordance with a comprehensive and type certification under the Civil Aviation(Airworthiness) Regulations.
	(2) Except as provided in 55(1), single-engine aeroplanes shall only be operated in conditions of weather and light, and over such routes and diversions therefrom, that permit a safe forced landing to be executed in the event of engine failure.
	(3) For aeroplanes exempted by the Authority which are not applicable because of the exemption provided for in Article 41 of the Convention, the State of Registry shall ensure that the level of performance specified in Regulation 52 is met as far as practicable.
Performance limitation of aeroplanes above 5700kg certificated between 13 <sup>th</sup> june, 1960 and 2 <sup>nd</sup> March, 2004 and those certificated after 2 <sup>nd</sup> March, 2004	<b>113.</b> (1) These Regulations shall be applicable to large aeroplanes to which aeroplanes certificated between 13 <sup>th</sup> june, 1960 and 2 <sup>nd</sup> March, 2004 and those certificated after 2 <sup>nd</sup> March, 2004..
	(2) The level of performance defined by the appropriate parts of the comprehensive and type certification referred to in Regulation 51(1) for the aeroplanes designated in sub regulation (1) shall be at least substantially equivalent to the overall level embodied in these Regulations.
	3) An aeroplane 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 State of Registry 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 this regulation.
	5) A flight shall not be commenced unless the performance information provided in the flight manual, supplemented as necessary with other data acceptable to the Authority, indicates that this regulation can be complied with for the flight to be undertaken.
	6) [Until 4 <sup>th</sup> November, 2020] In applying this regulation the operator, shall take into account all factors that significantly affect the performance of the aeroplane, including the mass of the aeroplane, the operating procedures, the pressure altitude appropriate to the elevation of the aerodrome, the ambient temperature, the wind, the runway slope, and surface conditions of the runway such as, presence of snow, slush, water, or ice for landplanes, water surface condition for seaplanes
	7) The factors in sub regulation (6) 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 comprehensive and detailed code of performance in accordance with which the aeroplane is being operated.
	8) [As of 5 November 2020,] in applying the Standards of this regulation, account shall be taken of all factors that significantly affect the performance of the aeroplane, including: the mass of the aeroplane, the operating procedures, the pressure-altitude appropriate to the elevation of the aerodrome, the runway slope, the ambient temperature, the wind, and surface conditions of the runway at the expected time of use, such as presence of snow, slush, water, or ice for landplanes, water surface condition for seaplanes.
	9) The factors in sub regulation (8) 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 comprehensive and detailed code of performance in accordance with which the aeroplane is being operated.
	Mass limitations

	<p>sub regulations (5), (6) and(7) are complied with, allowing for expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is envisaged in applying sub regulations (6) and (7) and, in respect of alternate aerodromes, sub regulations (1) ( c) and (7);</p> <p>(b) shall not exceed the maximum take-off mass specified in the flight manual for the pressure-altitude appropriate to the elevation of the aerodrome, and, if used as a parameter to determine the maximum take-off mass, any other local atmospheric condition;</p> <p>(c) shall not exceed the estimated mass for the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodrome, exceed the maximum landing mass specified in the flight manual for the pressure-altitude appropriate to the elevation of those aerodromes, and if used as a parameter to determine the maximum landing mass, any other local atmospheric condition;</p> <p>(d) or at the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodrome, shall not exceed the relevant maximum masses at which compliance has been demonstrated with the applicable noise certification, unless otherwise authorized in exceptional circumstances for a certain aerodrome or a runway where there is no noise disturbance problem, by the competent authority of the State in which the aerodrome is situated.</p>
	<p>(2) [<i>Take-off:</i>] The aeroplane shall be able, in the event of a critical engine failing, or for other safety reasons, at any point in the take-off, either to discontinue the take-off and stop within the accelerate-stop distance available, or to continue the takeoff and clear all obstacles along the flight path by an adequate vertical or horizontal distance until the aeroplane is in a position to comply with sub regulation(6).</p>
	<p>(3) When determining the resulting take-off obstacle accountability area, the operating conditions, such as the crosswind component and navigation accuracyshall be taken into account.</p>
	<p>(4) In determining the length of the runway available, account shall be taken of the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.</p>
	<p>(5) <i>En route — one engine inoperative:</i> The aeroplane shall, in the event of the critical engine becoming inoperative at any point along the route or planned diversions there from, be able to continue the flight to an aerodrome at which the requirement of sub regulation(7) can be met without flying below the minimum flight altitude at any point.</p>
	<p>(6)<i>En route — two engines inoperative:</i> In the case of aeroplanes having three or more engines, on any part of a route where the location of en-route alternate aerodromes and the total duration of the flight are such that the probability of a second engine becoming inoperative must be allowed for if the general level of safety implied by the Standards of these regulations is to be maintained, the aeroplane shall, in the event of any two engines becoming inoperative, be able to continue the flight to an en-route alternate aerodrome and land.</p>
	<p>(7) <i>Landing:</i> The PIC shall, at the aerodrome of intended landing and at any alternate aerodrome, after clearing all obstacles in the approach path by a safe margin, be able to land, with assurance that it can come to a stop or, for a seaplane, to a satisfactorily low speed, within the landing distance available.</p>
	<p>(8) Allowance shall be made for expected variations in the approach and landing techniques, if such allowance has not been made in the scheduling of performance data.</p>
<p>Obstacle Data</p>	<p><b>115.</b>(1) The Authority shall provideobstacle data to enable the operator to develop procedures to comply with Regulation 53(5).</p> <p>2) The operator shall take account of charting accuracy when assessing compliance with Regulation 53(2).</p>
<p>Additional requirements for operations</p>	<p><b>116.</b>(1) In approving operations by single-engine turbine-powered aeroplanes at night or in IMC, the Authority shall ensure that the airworthiness certification of the aeroplane is appropriate and that the overall level of safety intended by the provisions of these</p>

of single-engine turbine-powered aeroplanes at night and/or in instrument meteorological conditions (IMC)	regulations and the Civil Aviation(Airworthiness ) Regulation as provided by- a) the reliability of the turbine engine; b) the operator’s maintenance procedures, operating practices, flight dispatch procedures and crew training programs; and c) Equipment and other requirements provided in accordance with the Civil Aviation (Instrument and Equipment) Regulations .  2) All single-engine turbine-powered aeroplanes operated at night or in IMC shall have an engine trend monitoring system, and those aeroplanes for which the individual certificate of airworthiness is first issued [on or after 1 January 2005] shall have an automatic trend monitoring system.
	PART V AEROPLANE INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS
General	<b>117.</b> (1) In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed in this regulation shall be installed or carried, as appropriate, in aeroplanes according to the aeroplane used and to the circumstances under which the flight is to be conducted. (2) The prescribed instruments and equipment, including their installation, shall be approved or accepted by the State of Registry. (3) An operator shall ensure that a certified true copy of the air operator certificate specified in Regulation 11(1), and a certified true copy of the operations specifications relevant to the aeroplane type, issued in conjunction with the certificate is carried on board an aeroplane. (4) When the certificate and the associated operations specifications are issued by the Authority in a language other than English, an English translation shall be included. (5) The operator shall include in the operations manual a minimum equipment list (MEL), approved by the Authority which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. (6) Where the Authority is not the State of Registry, the Authority shall ensure that the MEL does not affect the aeroplane’s compliance with the airworthiness requirements applicable in [State]. (7) The operator shall provide operations staff and flight crew with an aircraft operating manual, for each aircraft type operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft. (8) The manual referred to under sub regulation (7) shall include details of the aircraft systems and of the checklists to be used, and the design of the manual shall observe Human Factors principles.
ALL AEROPLANES ON ALL FLIGHTS	<b>118.</b> (1) An aeroplane shall be equipped with instruments which will enable the flight crew to control the flight path of the aeroplane to carry out any required procedural maneuvers and observe the operating limitations of the aeroplane in the expected operating conditions. (2) An aeroplane shall be equipped with: a) accessible and adequate medical supplies which comprise of; i) one or more first-aid kits for the use of cabin crew in managing incidents of ill health; and ii) for aeroplanes required to carry cabin crew as part of the operating crew, one universal precaution kit(two for aeroplanes authorized to carry more than 250 passengers) for the use of cabin crew members in managing incidents of ill health associated with a case of suspected communicable disease, or in the case of illness involving contact with body fluids; and iii) for aeroplanes authorized to carry more than 100 passengers, on a sector length of more

	<p>than two hours, a medical kit, for the use of medical doctors or other qualified persons in treating in-flight medical Emergencies.</p> <p>b) portable fire extinguishers of a type which, when discharged, will not cause dangerous contamination of the air within the aeroplane, at least one shall be located in:</p> <p>i) the pilot's compartment; and</p> <p>ii) each passenger compartment that is separate from the pilot's compartment and that is not readily accessible to the flight crew;</p> <p>c) a seat or berth for each person over an age to be determined by the Authority;</p> <p>d) a seat belt for each seat and restraining belts for each berth; and</p> <p>e) a safety harness for each flight crew seat.</p> <p>f) The safety harness for each pilot seat shall incorporate a device which will automatically restrain the occupant's torso in the event of rapid deceleration;</p> <p>g) The safety harness for each pilot seat shall incorporate a device to prevent a suddenly incapacitated pilot from interfering with the flight controls.</p> <p>h) means of ensuring that the following information and instructions are conveyed to passengers:</p> <p>i) when seat belts are to be fastened;</p> <p>ii) when and how oxygen equipment is to be used if the carriage of oxygen is required;</p> <p>iii) restrictions on smoking;</p> <p>iv) location and use of life jackets or equivalent individual flotation devices where their carriage is required; and</p> <p>v) location and method of opening emergency exits; and</p> <p>i) spare electrical fuses of appropriate ratings for replacement of those accessible in flight.</p> <p>(3) Any agent used in a built-in fire extinguisher for each lavatory disposal receptacle for towels, paper or waste in an aeroplane for which the individual certificate of airworthiness is first issued on or after [31 December 2011] and any extinguishing agent used in a portable fire extinguisher in an aeroplane for which the individual certificate of airworthiness is first issued on or [after 31 December 2018] shall:</p> <p>a) meet the applicable minimum performance requirements of the State of Registry; and</p> <p>b) not be of a type listed in the 1987 <i>Montreal Protocol on Substances that Deplete the Ozone Layer</i> as it appears in the Eighth Edition of the <i>Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer</i>.</p> <p>(4) An operator shall ensure that an aeroplane carries:</p> <p>a) the operations manual prescribed in Regulation 13(1), or those parts of it that pertain to flight operations;</p> <p>b) the flight manual for the aeroplane, or other documents containing performance data and any other information necessary for the operation of the aeroplane within the terms of its certificate of airworthiness, unless these data are available in the operations manual; and</p> <p>c) Current and suitable charts to cover the route of the proposed flight and any route along which it is reasonable to expect that the flight may be diverted.</p>
Marking of break-in points	<p><b>119.</b>(1) If areas of the fuselage suitable for break-in by rescue crews in an emergency are marked on an aeroplane, such areas shall be marked as provided in regulation 17 of the Civil Aviation (Instrument and Equipment) Regulation, and the color of the markings shall be red or yellow, and if necessary they shall be outlined in white to contrast with the background.</p> <p>(3) If the corner markings are more than 2 m apart, intermediate lines 9 cm × 3 cm shall be inserted so that there is no more than 2 m between adjacent markings.</p>
	<p>PART VII AEROPLANE CONTINUING AIRWORTHINESS</p>
<i>Operator's continuing airworthiness responsibilities</i>	<p><b>120.</b>(1) Subject to procedures acceptable to the Authority, Operators shall ensure that: a) each aeroplane they operate is maintained in an airworthy condition;</p> <p>b) the operational and emergency equipment necessary for an intended flight is serviceable; and</p>

	<p>c) The certificate of airworthiness of each aeroplane they operate remains valid.</p> <p>(2) [Until 4 November 2020,] the operator shall not operate an aeroplane unless it is maintained and released to service by an organization approved in accordance with regulation 101 or under an equivalent system, either of which shall be acceptable to the Authority.</p> <p>(3) [As of 5 November 2020,] the operator shall not operate an aeroplane unless maintenance on the aeroplane, including any associated engine, propeller and part, is carried out by:</p> <p>a) an organization complying with Civil Aviation (Aircraft Maintenance Organisation) Regulations that is either approved by the Authority of the aeroplane or is approved by another Contracting State and is accepted by the Authority; or</p> <p>b) a licensed aircraft maintenance engineer in accordance with procedures that are authorized by the Authority, and there is a maintenance release in relation to the maintenance carried out.</p> <p>(4) [Until 4 November 2020,] when the Authority accepts an equivalent system, the person signing the maintenance release shall be licensed in accordance with Civil Aviation (Personnel Licensing) Regulations.</p> <p>(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.</p>
	<p>(6) The operator shall ensure that the maintenance of its aeroplanes is performed in accordance with the maintenance Programme.</p>
Operator's maintenance control manual	<p><b>121.</b>(1) The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance control manual, acceptable to the Authority, in accordance with the requirements of regulation 125, and the design of the manual shall observe Human Factors principles.</p> <p>(2) The operator shall ensure that the maintenance control manual is amended as necessary to keep the information contained therein up to date.</p> <p>(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.</p> <p>(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.</p>
Maintenance Programme	<p><b>122.</b>(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 126.</p> <p>(2) The design and application of the operator's maintenance programme shall observe Human Factors principles.</p> <p>(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.</p>
Continuing Airworthiness Records	<p><b>123.</b>(1) The operator shall ensure that the following records are kept for the periods mentioned in these regulations:</p> <p>a) the total time in service (hours, calendar time and cycles, as appropriate) of the aeroplane and all life-limited components;</p> <p>b) the current status of compliance with all mandatory continuing airworthiness information;</p> <p>c) appropriate details of modifications and repairs;</p> <p>d) the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aeroplane or its components subject to a mandatory overhaul life;</p> <p>e) the current status of the aeroplane's compliance with the maintenance programme; and</p> <p>f) the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.</p> <p>(2) The records in paragraphs (a) to (f) 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 in sub regulation (1)(f) for a minimum period of one year after the signing of the maintenance release.</p>

	<p>(3) In the event of a temporary change of operator, the records shall be made available to the new operator.</p> <p>(4) In the event of any permanent change of operator, the records shall be transferred to the new operator.</p> <p>(5) [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.</p>
Continuing airworthiness information	<p><b>124.</b>(1) The operator of an aeroplane over 5 700 kg maximum certificated take-off 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 in regulations governing airworthiness.</p> <p>(2) The operator of an aeroplane over 5 700 kg maximum certificated take-off 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.</p>
Modifications and repairs	<p><b>125.</b>(1) All modifications and repairs shall comply with airworthiness requirements acceptable to the Authority.</p> <p>(2) Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.</p>
Approved maintenance organization	<p><b>126.</b>[As of 5 November 2020,] an approved maintenance organization shall comply with the Civil Aviation (Aircraft Maintenance Organisation) Regulation on aircraft Maintenance organization approval.</p>
Issue of approval (Applicable until 4 November 2020)	<p><b>127.</b>(1) The issue of a maintenance organization approval by a State shall be dependent upon the applicant demonstrating compliance with the requirements of regulation 65 and the relevant provisions contained in the SMS regulations for such organizations.</p> <p>(2) The approval document shall contain at least the following:</p> <ol style="list-style-type: none"> <li>a) organization's name and location;</li> <li>b) date of issue and period of validity;</li> <li>c) terms of approval.</li> </ol> <p>(3) The continued validity of the approval shall depend upon the organization remaining in compliance with the requirements of regulation 65 and with the relevant provisions contained in the Civil Aviation (Safety Management) Regulations for an approved maintenance organization.</p>
Maintenance organization's procedures manual (Applicable until 4 November 2020)	<p><b>128.</b>(1) The maintenance organization shall, for purposes of use and guidance of maintenance personnel concerned, provide a procedures manual which may be issued in separate parts containing the following information:</p> <ol style="list-style-type: none"> <li>a) a general description of the scope of work authorized under the organization's terms of approval;</li> <li>b) a description of the organization's procedures and quality or inspection system in accordance with regulation 69;</li> <li>c) a general description of the organization's facilities;</li> <li>d) names and duties of the person or persons required by regulation 71;</li> <li>e) a description of the procedures used to establish the competence of maintenance personnel as required by regulation 71</li> <li>f) a description of the method used for the completion and retention of the maintenance records required by regulation 72;</li> <li>g) a description of the procedures for preparing the maintenance release and the circumstances under which the release is to be signed;</li> <li>h) the personnel authorized to sign the maintenance release and the scope of their authorization;</li> <li>i) a description, when applicable, of the additional procedures for complying with the</li> </ol>

	<p>operator's maintenance procedures and requirements;</p> <p>j) a description of the procedures for complying with the service information reporting requirements of Civil Aviation (Aircraft Maintenance Organisation) Regulations; and</p> <p>k) a description of the procedure for receiving, assessing, amending and distributing within the maintenance organization all necessary airworthiness data from the type certificate holder or type design organization.</p> <p>(2) The maintenance organization shall ensure that the procedures manual is amended as necessary to keep the information contained therein up to date.</p> <p>(3) Copies of all amendments to the procedures manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.</p>
Safety management	<p><b>129.</b> All approved maintenance organizations shall implement safety management provisions in accordance with the Civil Aviation (Safety Management) Regulations .</p>
Maintenance procedures and quality assurance system	<p><b>130.</b>(1) The maintenance organization shall establish procedures, acceptable to the Authority to ensure good maintenance practices and compliance with all relevant requirements of these Regulation.</p> <p>(2) The maintenance organization shall ensure compliance with these regulations by either establishing an independent quality assurance system to monitor compliance with and adequacy of the procedures, or by providing a system of inspection to ensure that all maintenance is properly performed.</p>
Facilities	<p><b>131.</b>(1) The facilities and working environment shall be appropriate for the task to be performed.</p> <p>(2) The maintenance organization shall have the necessary technical data, equipment, tools and material to perform the work for which it is approved.</p> <p>(3) Storage facilities shall be provided for parts, equipment, tools and material. Storage conditions shall be such as to provide security and prevent deterioration of and damage to stored items.</p>
Personnel	<p><b>132.</b>(1) The maintenance organization shall nominate a person or group of persons whose responsibilities include ensuring that the maintenance organization is in compliance with the requirements of regulation 65 for an approved maintenance organization.</p> <p>(2) The maintenance organization shall employ the necessary personnel to plan, perform, supervise, inspect and release the work to be performed</p> <p>(3) The competence of maintenance personnel shall be established in accordance with a procedure and to a level acceptable to the Authority. The person signing a maintenance release shall be qualified in accordance with Personnel licensing regulations.</p> <p>(4) The maintenance organization shall ensure that all maintenance personnel receive initial and continuation training appropriate to their assigned tasks and responsibilities.</p> <p>(5) The training programme established by the maintenance organization shall include training in knowledge and skills related to human performance, including coordination with other maintenance personnel and flight crew.</p>
Records ( )	<p><b>133.</b>1) The maintenance organization shall retain detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.</p> <p>(2) The records required by this regulation shall be kept for a minimum period of one year after the signing of the maintenance release.</p>
Maintenance release	<p><b>134.</b>(1) (a) [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.</p> <p>(b) {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 of aircraft regulations.</p> <p>(2)(a) [Until 4 November 2020], a maintenance release shall contain a certification including:</p>

	<p>i) basic details of the maintenance carried out including detailed reference of the approved data used;</p> <p>ii) the date such maintenance was completed;</p> <p>iii) when applicable, the identity of the approved maintenance organization; and</p> <p>iv) the identity of the qualified person or persons signing the release.</p> <p>(b)[ 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 personnel licensing regulations to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and procedures acceptable to the Authority</p>
	<p>(3) [As of 5 November 2020], when maintenance is not carried out by an approved maintenance organization, the maintenance release shall include the following:</p> <p>a) basic details of the maintenance carried out including detailed reference of the approved data used;</p> <p>b) the date such maintenance was completed; and</p> <p>c) the identity of the qualified person or persons signing the release.</p>
<p><b>PART VIII</b> <b>AEROPLANE FLIGHT CREW</b></p>	
Composition of the flight crew	<p><b>135.</b>(1)The number and composition of the flight crew shall not be less than that specified in the operations manual.</p>
	<p>(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 aeroplane used, the type of operation involved and the duration of flight between points where flight crews are changed.</p>
Radio operator	<p><b>136.</b>The flight crew shall include at least one member who holds a valid license, issued or rendered valid by the State of Registry, authorizing operation of the type of radio transmitting equipment to be used.</p>
Flight engineer	<p><b>137.</b>When a separate flight engineer’s station is incorporated in the design of an aeroplane, the flight crew shall include at least one flight engineer especially assigned to that station, unless the duties associated with that station can be satisfactorily performed by another flight crew member, holding a flight engineer license, without interference with regular duties.</p>
One pilot qualified to perform flight engineer functions	<p><b>138.</b>An air operator certificate holder shall ensure that, on all flights requiring a flight engineer, there is assigned at least one other flight crew member qualified to perform the flight engineer duties in the event the flight engineer becomes incapacitated.</p>
Flight crew member emergency duties	<p><b>139.</b>(1)The operator shall, for each type of aeroplane, assign to all flight crew members the necessary functions they are to perform in an emergency or in a situation requiring emergency evacuation.</p>
	<p>(2)Annual training in accomplishing these functions 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 aeroplane.</p>
Flight crew member training	<p><b>140.</b>(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.</p>
	<p>(2) The training programme shall:</p>

programmes	<p>a) include ground and flight training facilities and properly qualified instructors as determined by the Authority</p> <p>b) consist of ground and flight training in the type(s) of aeroplane on which the flight crew member serves;</p> <p>c) include proper flight crew coordination and training in all types of emergency and abnormal situations or procedures caused by engine, airframe or systems malfunctions, fire or other abnormalities;</p> <p>d) include upset prevention and recovery training;</p> <p>e) include training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, charting, human performance including threat and error management and in the transport of dangerous goods;</p> <p>f) 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; and</p> <p>g) be undertaken on a recurrent basis, as determined by the Authority and shall include an assessment of competence.</p> <p>(3) The requirement for recurrent flight training in a particular type of aeroplane shall be considered fulfilled by:</p> <p>a) the use, to the extent deemed feasible by the Authority, of flight simulation training devices approved by that State for that purpose; or</p> <p>b) the completion within the appropriate period of the proficiency check required by regulation 120 in that type of aeroplane.</p>
Duties during critical phases of flight	<p><b>141.</b>A flight crew member shall not:</p> <p>(a) perform any duties during a critical phase of flight except duties required for the safe operation of the aircraft;</p> <p><b>(b) engage in any activity during a critical phase of flight which may distract or interfere with the performance of that flight crew member’s assigned duties.</b></p>
Manipulation of the controls:	<p><b>142.</b>(1) A PIC shall not allow an unqualified person to manipulate the controls of an aircraft during commercial air transport operations.</p> <p>(2) A person shall not manipulate the controls of an aircraft during commercial air transport operations unless such person is qualified to manipulate the controls and is authorised to do so by the air operator certificate holder.</p>
Power to inspect	<p><b>143.</b>(1) The (PIC) shall give an inspector free and uninterrupted access to the aircraft, including the cockpit, when an inspector from the Authority presents valid aviation safety inspector credentials to the PIC in order to conduct an inspection.</p> <p>(2) The PIC may refuse an inspector access to the cockpit if, in his opinion, the safety of the aircraft may be endangered.</p>
Recent experience — pilot-in-command and co-pilot	<p><b>144.</b> (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 aeroplane 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 aeroplane or in a flight simulator approved for the purpose.</p> <p>(2)Where a pilot-in-command or a co-pilot is flying several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide under which conditions the</p>

	requirements of this regulations for each variant or each type of aeroplane can be combined.
	(3) The take-offs and landings required by sub-regulation (1) may be performed in a visual synthetic flight trainer approved by the Authority to include take-off and landing manoeuvres and any person who fails to make the three required take-offs and landings within any consecutive ninety-day period shall re-establish recency of experience as provided in sub-regulation (3).
	(4) In addition to meeting all applicable training and checking requirements of these Regulations, a required flight crew member who has not met the requirements of sub-regulation (1) shall re-establish recency of experience as follows- (a) under the supervision of a check pilot, make at least three take-offs and landings in the type of aircraft in which that person is to serve or if an advanced synthetic flight trainer is used, the requirements of subregulation (4) shall be met; (b) the take-offs and landings required in this paragraph shall include- (i) at least one take-off with a simulated failure of the most critical engine; (ii) at least one landing from an instrument landing system approach to the lowest instrument landing system minimum authorized for the certificate holder; and (iii) at least one landing to a full stop.
	(5) A required flight crew member who performs the manoeuvres prescribed in sub-regulation (3) in a visual synthetic flight trainer shall- (a) have previously logged one hundred hours of flight time in the same aircraft type in which the pilot is to serve; and (b) be observed on the first two landings made in operations under this Part by an approved check pilot who acts as pilot-in-command and occupies a pilot seat and the landings must be made in weather minima that are not less than those contained in the AOC holder's operation specifications for Category I operations, and shall be made within forty five days following completion of synthetic flight trainer training.
	(6) When using a synthetic flight trainer to accomplish any of the requirements of sub-regulation (1) or (3), a required flight crew member position shall be operated as if in a normal in-flight environment without use of the repositioning features of the synthetic flight trainer.
	(7) (6) A check pilot who observes the take-offs and landings prescribed in subregulation (3)(a) and (4) shall certify that the person being observed is proficient and qualified to perform flight duty in operations under this Part and may require any additional manoeuvres that are determined necessary to make this certifying statement.
Pilot operating limitations and pairing requirements	<b>145.</b> (1) Where a co-pilot has fewer than one hundred hours of flight time as co-pilot in operations in the aircraft type being flown, and the pilot-in-command (PIC) is not an appropriately qualified check pilot, the PIC shall make all take-offs and landings in the following situations. (a) special airports designated by the Authority or special airports designated by the AOC holder; and (b) in any of the following conditions: (i) the prevailing visibility value in the latest weather report for the airport is at or below 1200 m; (ii) the Runway Visual Range (RVR) for the runway to be used is at or below 4,000 feet; (iii) the runway to be used has water, snow, slush or similar conditions that may adversely

	<p>affect aircraft performance;</p> <p>(iv) the braking action on the runway to be used is reported to be less than “good”;</p> <p>(v) the crosswind component for the runway to be used is in excess of 15 knots;</p> <p>(vi) wind shear is reported in the vicinity of the airport; or.</p> <p>(vii) any other condition in which the PIC determines it to be prudent to exercise the PIC’s prerogative.</p> <p>(2) A person shall not conduct operations under the Civil Aviation (Air Operator Certification and Administration) Regulations (citation) unless, for that type aircraft, either the PIC or the co-pilot has at least seventy five hours of line operating flight time, either as PIC or co-pilot.</p> <p>(3) The Authority may, upon application by the AOC holder, authorize exemptions from the requirements of this regulation by an appropriate amendment to the operations specifications in any of the following circumstances-</p> <p>(a) a newly certificated AOC holder does not employ any pilots who meet the minimum requirements of this regulation;</p> <p>(b) an existing AOC holder adds to its fleet an aircraft type not before proven for use in its operations; or</p> <p>(c) an existing certificate holder establishes a new domicile to which it assigns pilots who will be required to become qualified on the aircraft operated from that domicile.</p>
Recent experience — cruise relief pilot	<p><b>146.</b> (1)The operator shall not assign a pilot to act in the capacity of cruise relief pilot in a type or variant of a type of aeroplane unless, within the preceding 90 days that pilot has either:</p> <p>a) operated as a pilot-in-command, co-pilot or cruise relief pilot on the same type of aeroplane; or</p> <p>b) carried out flying skill refresher training including normal, abnormal and emergency procedures specific to cruise flight on the same type of aeroplane or in a flight simulator approved for the purpose, and has practiced approach and landing procedures, where the approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane.</p> <p>(2) When a cruise relief pilot is flying several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide under which conditions the requirements of these regulations for each variant or each type of aeroplane can be combined.</p>
Pilot-in-command area, route and aerodrome qualification	<p><b>147.</b>(1)The operator shall not utilize a pilot as pilot-in-command of an aeroplane on a route or route segment for which that pilot is not currently qualified until such pilot has complied with this regulation.</p> <p>(2) Each pilot referred to in sub regulation 1 shall demonstrate to the operator an adequate knowledge of:</p> <p>a) the route to be flown, and the aerodromes which are to be used. This shall include knowledge of:</p> <p>i. the terrain and minimum safe altitudes;</p> <p>ii. the seasonal meteorological conditions;</p> <p>iii. the meteorological, communication and air traffic facilities, services and procedures;</p>

	<p>iv. the search and rescue procedures; and</p> <p>v. the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place; and</p> <p>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.</p> <p>c) That 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.</p> <p>(3) A pilot-in-command shall have made an actual approach into each aerodrome of landing on the route, accompanied by a pilot who is qualified for the aerodrome, as a member of the flight crew or as an observer on the flight deck, unless:</p> <p>a) the approach to the aerodrome is not over difficult terrain and the instrument approach procedures and aids available are similar to those with which the pilot is familiar, and a margin to be approved by the Authority is added to the normal operating minima, or there is reasonable certainty that approach and landing can be made in visual meteorological conditions; or</p> <p>b) the descent from the initial approach altitude can be made by day in visual meteorological conditions; or</p> <p>c) the operator qualifies the pilot-in-command to land at the aerodrome concerned by means of an adequate pictorial presentation; or</p> <p>d) the aerodrome concerned is adjacent to another aerodrome at which the pilot-in-command is currently qualified to land.</p> <p>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.</p> <p>5 The operator shall not continue to utilize a pilot as a pilot-in-command on a route or within an area specified by the operator and approved by the Authority unless, within the preceding 12 months, that pilot has made at least [one trip ]as a pilot member of the flight crew, or as a check pilot, or as an observer in the flight crew compartment:</p> <p>a) within that specified area; and</p> <p>b) if appropriate, on any route where procedures associated with that route or with any aerodromes intended to be used for take-off or landing require the application of special skills or knowledge.</p> <p>6 In the event that more than 12 months elapse in which a pilot-in-command has not made such [a trip] on a route in close proximity and over similar terrain, within such a specified area, route or aerodrome, and has not practiced such procedures in a training device which is adequate for this purpose, prior to again serving as a pilot-in-command within that area or on that route, that pilot shall requalify in accordance with this regulation.</p>
<p>PIC aeronautical experience: Small aircraft</p>	<p><b>148.</b>An operator shall ensure that-</p> <p>(a) a Commercial Pilot Licence holder does not operate as a pilot-in command (PIC) certificated in the Aircraft Flight Manual for single pilot operations unless-</p> <p>(i) when conducting passenger carrying operations under visual flight rules outside a radius of 50 nm from an aerodrome of departure, the pilot has a minimum of 500 hours total flight time on aeroplanes or holds a valid instrument rating; or</p> <p>(ii) when operating on a multi-engine type under instrument flight rules (IFR), the pilot has a minimum of 700 hours total flight time on aeroplanes which includes 400 hours as PIC of which 100 hours have been under IFR including 40 hours multi-engine operation; and</p>

	<p>(iii) the 400 hours referred to sub-paragraph (ii) are substituted by hours operating as co-pilot on the basis that two hours co-pilot is equivalent to one hour as PIC provided that those hours were gained within an established multi-pilot crew system prescribed in the Operations Manual specified in the Civil Aviation (Air Operator Certification and Administration) Regulations.</p> <p>(b) in addition to paragraph (a)(ii), when operating under IFR as a single pilot, requirements prescribed in regulation 33 are satisfied; and</p> <p>(c) in multi-pilot crew operations, in addition to sub-paragraph (a), and prior the pilot operating as PIC, the command course prescribed in the Operations Manual specified in the Civil Aviation (Air Operator Certification and Administration) Regulations is completed.</p>
Co-pilot licence requirements	<p><b>149.</b> A pilot shall not act as co-pilot of an aircraft in commercial air transport operations unless that pilot holds-</p> <p>(a) a commercial pilot licence with appropriate category class and type ratings for the aircraft operated; and</p> <p>(b) an instrument rating.</p>
Pilot Age restriction	<p><b>150.</b> A person shall not serve nor shall any air operator certificate holder use a person as a required pilot on an aircraft engaged in international commercial air transport operations if that person has attained the age of sixty five years.</p>
PIC licence requirements: turbojet, turbofan or large aircraft	<p><b>151.</b> A pilot shall not act as pilot-in-command of a non-turbojet or turbofan small aircraft in commercial air transport operations during-</p> <p>(a) instrument flight rules operations unless that pilot holds a Commercial Pilot Licence (CPL) with appropriate category class ratings for the aircraft operated, and an instrument rating and meets the experience requirements for operation; or</p> <p>(b) day visual flight rules operations unless that pilot holds a CPL with appropriate category and class ratings for the aircraft operated.</p>
Pilot proficiency checks	<p><b>152.</b> (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 aeroplane.</p> <p>(2) Where the operation may be conducted under instrument flight rules, 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</p> <p>(3) Pilot proficiency checks shall be performed twice within any period of one year</p> <p>(4) Any two pilot proficiency checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.</p> <p>(5) Flight simulation training devices approved by the Authority may be used for those parts of the checks for which they are specifically approved.</p> <p>(6) Where the operator schedules flight crew on several variants of the same type of aeroplane or different types of aeroplanes 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 aeroplane can be combined.</p>
Single pilot operations under the instrument flight rules	<p><b>153.</b> (1) The Operator shall comply with prescribed requirements of experience, recency and training applicable to single pilot operations intended to be carried out under the IFR or at night.</p>

(IFR) or at night	<p>(2)The pilot-in-command shall:</p> <ul style="list-style-type: none"> <li>a) for operations under the IFR or at night, have accumulated at least [50 hours] flight time on the classof aeroplane, of which at least [10 hours] shall be as pilot-in-command;</li> <li>b) for operations under the IFR, have accumulated at least [25 hours] flight time under the IFR on the class of aeroplane, which may form part of the [ 50 hours] flight time in paragraph a);</li> <li>c) for operations at night, have accumulated at least [15 hours] flight time at night, which may form part of the [50 hours] flight time in paragraph a);</li> <li>d) for operations under the IFR, have acquired recent experience as a pilot engaged in a single pilot operation under the IFR of: <ul style="list-style-type: none"> <li>(i) at least five IFR flights, including three instrument approaches carried out during the preceding 90 days on the class of aeroplane in the single pilot role; or</li> <li>(ii) an IFR instrument approach check carried out on such an aeroplane during the preceding 90 days;</li> </ul> </li> <li>e) for operations at night, have made at least [three take-offs and landings at night] on the class of aeroplane in the single pilot role in the preceding 90 days; and</li> <li>f) have successfully completed training programmes that include, in addition to the requirements of regulation 78, passenger briefing with respect to emergency evacuation, autopilot management, and the use of simplified in-flight documentation.</li> </ul> <p>(3) The initial and recurrent flight training and proficiency checks indicated in regulation 78 and regulation 83 shall be performed by the pilot-in-command in the single pilot role on the class of aeroplane in an environment representative of the operation.</p>
Pilot authorisation in lieu of a type rating.	<p><b>154.</b>The Authority may authorise a pilot to operate an aircraft requiring a type rating without a type rating for a period not exceeding sixty days, provided that-</p> <ul style="list-style-type: none"> <li>(a) the applicant has demonstrated to the satisfaction of the Authority that an equivalent level of safety can be achieved through the operating limitations on the authorisation;</li> <li>(b) the applicant shows that compliance with these Regulations is impracticable for the flight or series of flights;</li> <li>(c) the operations- <ul style="list-style-type: none"> <li>(i) involve only a ferry flight, training to qualify on type or test flight;</li> <li>(ii) are within the United Republic of Tanzania , unless, by previous agreement with the Authority, the aircraft is flown to an adjacent Contracting State for maintenance;</li> <li>(iii) are not for compensation or hire unless the compensation or hire involves payment for the use of the aircraft for training; and</li> <li>(iv) involve only the carriage of flight crew members considered essential for the flight.</li> </ul> </li> </ul>
Licences required	<p><b>155.</b>(1) A person shall not act as pilot-in-command or in any other capacity as a required flight crew member of an aircraft-</p> <ul style="list-style-type: none"> <li>(a) registered in [State], unless that person carries in his personal possession the appropriate and current licence for that flight crew position for that type of aircraft; or</li> <li>(b) of foreign registry, unless that person carries in his personal possession a valid and current licence for that type of aircraft issued to them by the State of registry.</li> </ul> <p>(2) The flight crew for international and domestic operations shall hold a valid radio telephony operator licence or endorsement issued or rendered valid by the State of Registry, authorizing operation of the type of radio transmitting equipment to be used.</p>

Pilots: Qualifications	<p><b>156.</b>(1) A person shall not operate an aircraft in commercial air transport or aerial work unless that person is qualified for the specific operation and in the specific type of aircraft used.</p> <p>(2) The operator or owner of the aircraft shall ensure that flight crew engaged in civil aviation operations speak and understand the English Language.</p>
Fitness of crew members	<p><b>157.</b>(1) A person shall not act as a required crew member at any time when that person is aware of any decrease in the medical fitness which might render him unable to safely and properly execute the duties of a crew member.</p> <p>(2) The operator and the PIC shall be responsible for ensuring that a flight is not-</p> <p>(a) commenced if any required crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, the effects of alcohol or drugs; or</p> <p>(b) continued beyond the nearest suitable aerodrome if a flight crew members capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness or lack of oxygen.</p>
Special authorisation required for Category II or III operations	<p><b>158.</b>(1) A person shall not act as a pilot of an aircraft in a Category II or III operations unless-</p> <p>(a) in the case of a pilot-in-command , the person holds a current Category II or III pilot authorisation for that aircraft type; or</p> <p>(b) in the case of a co-pilot, the person is authorised by the State of Registry to act in that capacity in that aircraft in Category II or III operations.</p> <p>(2) An authorisation is not required for individual pilots of an AOC holder which has operations specifications approving Category II or III operations.</p>
Recording of flight time	<p><b>159.</b>(1) A pilot shall record and keep details of all flights he has flown in a logbook format acceptable to the Authority.</p> <p>(2) An AOC holder:</p> <p>(a) may record details of flights flown by a pilot in an acceptable computerised format maintained by the AOC holder; and</p> <p>(b) shall make the records of all flights operated by the pilot, including differences and familiarisation training, available on request to the pilot concerned.</p> <p>(3) The record referred to in sub-regulation (1) and (2) shall contain the following information-</p> <p>(a) personal details: name and address of the holder;</p> <p>(b) for each flight:</p> <p>(i) name of the PIC;</p> <p>(ii) date , day, month and year of flight;</p> <p>(iii) place and time of departure and arrival, times to be UTC and block to block;</p> <p>(iv) type , aircraft make, model and variant, and registration of aircraft;</p> <p>(v) single engine or multi-engine;</p> <p>(vi) total time of flight;</p> <p>(vii) accumulated total time of flight;</p> <p>(c) for each synthetic flight trainer or flight and navigation procedures trainers session:</p> <p>(i) type and qualification number of training device;</p> <p>(ii) synthetic training device instruction;</p> <p>(iii) date, month and year);</p> <p>(iv) total time of session; and</p> <p>(v) accumulated total time;</p> <p>(d) pilot function-</p> <p>(i) the PIC,</p>

	<p>(ii) the co-pilot;</p> <p>(iii) dual;</p> <p>(iv) authorised instructor or authorised examiner;</p> <p>(v) a remarks column to give details of specific functions such as student PIC time, PIC under supervision time, PIC instrument flight time, etc;</p> <p>(e) operational conditions-</p> <p>(i) night; or</p> <p>(ii) instrument flight rules;</p> <p>(4) Logging of time-</p> <p>(a) PIC flight time:</p> <p>(i) the holder of a licence may log as PIC time all of the flight time during which he is the PIC;</p> <p>(ii) the applicant for or the holder of a pilot licence may log as PIC time all solo flight time and flight time as student PIC provided that such student PIC time is countersigned by the instructor;</p> <p>(iii) the holder of an instructor rating may log as PIC all flight time during which he acts as an instructor in an aeroplane;</p> <p>(iv) the holder of an examiner's authorisation may log as PIC all flight time during which he occupies a pilot's seat and acts as an examiner in an aeroplane;</p> <p>(v) a co-pilot acting as PIC under the supervision of the PIC on an aeroplane on which more than one pilot is required under the certificate of airworthiness of the aeroplane or by these Regulations may log as PIC under supervision flight time, provided such PIC time under supervision is countersigned by the PIC; or</p> <p>(vi) where the holder of a licence carries out a number of flights upon the same day returning on each occasion to the same place of departure and the interval between successive flights does not exceed thirty minutes, such series of flights are to be recorded as a single entry.</p> <p>(b) co-pilot flight time: the holder of pilot licence occupying a pilot seat as co-pilot may log all flight time as co-pilot flight time on an aeroplane on which more than one pilot is required under the certificate of airworthiness of the aeroplane;</p> <p>(c) cruise relief co-pilot flight time: a cruise relief co-pilot may log all flight time as co-pilot when occupying a pilot's seat;</p> <p>(d) instruction time: a summary of all time logged by an applicant for a licence or rating as flight instruction, instrument flight instruction, instrument ground time, shall be certified by the appropriately rated or authorised instructor from whom it was received;</p> <p>(e) PIC under supervision: a co-pilot may log as PIC under supervision flight time flown as PIC under supervision, when all of the duties and functions of PIC on that flight were carried out, such that the intervention of the PIC in the interest of safety was not required, provided that the method of supervision is acceptable to the Authority.</p> <p>(5) Presentation of flight time record-</p> <p>(a) the holder of a licence or a student pilot shall without undue delay present his flight time record for inspection upon request by an authorised person; and</p> <p>(b) a student pilot shall carry his flight time record logbook with him on all solo cross-country flights as evidence of the required instructor authorisations.</p>
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Completion of the technical logbook:	<b>160.</b> A pilot-in-command shall ensure that all portions of the technical logbook required under the Civil Aviation (Air Operator Certification and Administration) Regulations, are completed at the appropriate points before, during and after flight operations.
Reporting mechanical irregularities	<b>161.</b> A pilot-in-command shall ensure that all mechanical irregularities occurring during flight time are- (a) reported to the operator at the termination of the flight; (b) for general aviation operations, entered in the aircraft logbook and dealt with in accordance with the Minimum Equipment List or other approved or prescribed procedure; (c) for commercial air transport operations, entered in the technical log of the aircraft at the end of that flight time.
Reporting of facility and navigation aid inadequacies	<b>162.</b> (1) An operator shall report, without delay, any inadequacy or irregularity of a facility or navigational aid observed in the course of operations to the person responsible for that facility or navigational aid. (2) Subject to their published conditions of use, aerodromes and their facilities shall be kept continuously available for flight operations during their published hours of operations, irrespective of weather conditions.
Pilot privileges and limitations	<b>163.</b> A pilot shall not conduct flight operations unless the operations are within the privileges and limitations of each licence he holds as specified in the Civil Aviation (Personnel Licensing) Regulations.
Flight crew equipment	<b>164.</b> A flight crew member assessed as fit to exercise the privileges of a license, subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.
Crew CRM Training	<b>165.</b> (1) A person shall not serve nor shall any AOC holder use a person as a crew member or flight operations officer unless that person has completed the initial crew resource management (CRM) curriculum approved by the Authority. (2) An AOC holder shall ensure that all crew members have crew resource management training as part of their initial and recurrent training requirements. (3) A crew resource management training program shall include- (a) an initial indoctrination or awareness segment; (b) a method to provide recurrent practice and feedback; and (c) a method of providing continuing reinforcement. (4) Curriculum topics to be contained in an initial crew resource management training course include: (a) communications processes and decision behaviour; (b) internal and external influences on interpersonal communications; (c) barriers to communication; (d) listening skills; (e) decision making skills; (f) effective briefings; (g) developing open communications; (h) inquiry, advocacy, and assertion training; (i) crew self-critique; (j) conflict resolution; (k) team building and maintenance;

	<ul style="list-style-type: none"> <li>(l) leadership and fellowship training;</li> <li>(m) interpersonal relationships;</li> <li>(n) workload management;</li> <li>(o) situational awareness;</li> <li>(p) how to prepare, plan and monitor task completions;</li> <li>(q) workload distribution;</li> <li>(r) distraction avoidance;</li> <li>(s) individual factors; and</li> <li>(t) stress reduction.</li> </ul>
<p style="text-align: center;">Initial emergency equipment drills</p>	<p><b>166.</b>(1) A person shall not serve nor shall any air operator certificate (AOC) holder use a person as a crew member unless that person has completed the appropriate initial emergency equipment curriculum and drills for the crew member position approved by the Authority for the emergency equipment available on the aircraft to be operated.</p> <p>(2) A crew member shall complete emergency training during the specified training periods, using the items of installed emergency equipment for each type of aircraft in which that crew member is to serve.</p> <p>(3) During initial training, a crew member shall perform the following onetime emergency drills-</p> <ul style="list-style-type: none"> <li>(a) protective breathing equipment or fire-fighting drill- <ul style="list-style-type: none"> <li>(i) locate the source of fire or smoke for an actual or simulated fire;</li> <li>(ii) implement procedures for effective crew co-ordination and communication, including notification of flight crew members about the fire situation;</li> <li>(iii) don and activate installed protective breathing equipment or approved protective breathing equipment simulation device;</li> <li>(iv) manoeuvre in limited space with reduced visibility;</li> <li>(v) effectively use the aircraft's communication system;</li> <li>(vi) identify the class of fire;</li> <li>(vii) select the appropriate extinguisher;</li> <li>(viii) properly remove the extinguisher from the securing device;</li> <li>(ix) prepare, operate and discharge the extinguisher properly; and</li> <li>(x) utilise the correct fire-fighting techniques for type of fire;</li> </ul> </li> <li>(b) emergency evacuation drill- <ul style="list-style-type: none"> <li>(i) recognise and evaluate an emergency;</li> <li>(ii) assume the appropriate protective position;</li> <li>(iii) command passengers to assume protective position;</li> <li>(iv) implement crew co-ordination procedures;</li> <li>(v) ensure activation of emergency lights;</li> <li>(vi) assess aircraft condition;</li> <li>(vii) initiate evacuation, dependent on signal or decision;</li> <li>(viii) command passengers to release their seatbelts and evacuate;</li> <li>(ix) assess exit and redirect passengers, if necessary, to open exits, including deploying slides and commanding helpers to assist;</li> <li>(x) command the passengers to evacuate at exit and run away from the aircraft;</li> </ul> </li> </ul>

(xi) assist special need passengers, such as handicapped, elderly, and persons in a state of panic; and  
(xii) actually exit the aircraft or training device using at least one of the installed emergency evacuation slides.

(4) In the case of an emergency evacuation drill, the crew member may either observe the aircraft exits being opened in the emergency mode and the associated exit slider or aft pack being deployed and inflated, or perform the tasks resulting in the accomplishment of these actions.

(5) An aircraft crew member shall accomplish additional emergency drills during initial and recurrent training, including performing the following emergency drills-

(a) emergency exit drill:

(i) correctly pre-flight each type of emergency exit and evacuation slide or slide raft, if part of cabin crew member's assigned duties;

(ii) disarm and open each type of door exit in normal mode;

(iii) close each type of door exit in normal mode;

(iv) arm each type of door exit in emergency mode;

(v) open each type of door exit in emergency mode;

(vi) use the manual slide inflation system to accomplish or ensure slide or slide raft inflation;

(vii) open each type of window exit;

(viii) remove the escape rope and position it for use;

(b) hand fire extinguisher drill fighting an actual or a simulated fire is not necessary during this drill-

(i) pre-flight each type of hand fire extinguisher;

(ii) locate the source of fire or smoke and identify class of fire;

(iii) select the appropriate extinguisher and remove from securing device;

(iv) prepare the extinguisher for use;

(v) actually operate and discharge each type of installed hand fire extinguisher;

(vi) utilise correct fire-fighting techniques for the type of fire; and

(vii) implement procedures for effective crew coordination and communication, including notification of crew members about the type of fire situation;

(c) emergency oxygen system drill;

(i) actually operate portable oxygen bottles, including masks and tubing;

(ii) verbally demonstrate operation of chemical oxygen generators;

(iii) prepare for use and properly operate an oxygen device, including donning and activation;

(iv) administer oxygen to self, passengers, and to those persons

with special oxygen needs;

- (v) utilise proper procedures for effective crew coordination and communication;
- (vi) activate protective breathing equipment;
- (vii) manually open each type of oxygen mask compartment and deploy oxygen masks;
- (viii) identify compartments with extra oxygen masks;
- (ix) implement immediate action decompression procedures; and
- (x) reset the oxygen system, if applicable.

(d) flotation device drill-

- (i) don and inflate life vests;
- (ii) remove and use flotation seat cushions; and
- (iii) demonstrate swimming techniques using a seat cushion.

(e) ditching drill, if applicable, during which ditching drill trainees shall perform the "prior to impact" and "after impact" procedures for a ditching, as appropriate to the specific operator's type of operation-

- (i) implement crew coordination procedures, including a briefing with the captain to obtain pertinent ditching information and briefing cabin crew members;
- (ii) coordinate time-frame for cabin and passenger preparation;
- (iii) adequately brief passengers on ditching procedures;
- (iv) ensure the cabin is prepared, including the securing of carry-on baggage, lavatories, and galleys;
- (v) demonstrate how to properly deploy and inflate slide rafts;
- (vi) remove, position and attach slide rafts to aircraft;
- (vii) inflate the rafts;
- (viii) use escape ropes at over wing exits;
- (ix) command any helpers to assist;
- (x) use slides and seat cushions as flotation devices;
- (xi) remove appropriate emergency equipment from the aircraft;
- (xii) board rafts properly;
- (xiii) initiate raft management procedures, such as disconnecting rafts from aircraft, applying immediate first aid, rescuing persons in water, salvaging floating rations and equipment, deploying sea anchor, tying rafts together, and activating or ensuring operation of emergency locator transmitter;
- (xiv) initiate basic survival procedures, such as removing and utilising survival kit items, repairing and maintaining raft, ensuring protection from exposure, erecting canopy, communicating location, providing continued first aid, and providing sustenance;
- (xv) use heaving line to rescue persons in the water
- (xvi) tie slide rafts or rafts together;
- (xvii) use life line on edge of slide raft or raft as a handhold; and

	<p>(xviii)secure survival kit items.</p> <p>(6) An aircraft crew member shall accomplish additional emergency drill requirements during initial and recurrent training including observing the following emergency drills-</p> <p>(a) life raft removal and inflation drill, if applicable-</p> <p>(i) removal of a life raft from the aircraft or training device; and</p> <p>(ii) inflation of a life raft;</p> <p>(b) slide raft transfer drill-</p> <p>(i) transfer each type of slide raft pack from an unusable door to a usable door;</p> <p>(ii) disconnect the slide raft at an unusable door;</p> <p>(iii) redirect passengers to the usable slide raft; and</p> <p>(iv) install and deploy the slide raft at a usable door.</p> <p>(c) slide and slide raft deployment, inflation, and detachment-</p> <p>(i) engage slide girt bar in floor brackets;</p> <p>(ii) inflate slides with and without quick-release handle, manually and automatically;</p> <p>(iii) disconnect slide from aircraft for use as a flotation device;</p> <p>(iv) arm slide rafts for automatic inflation; and</p> <p>(v) disconnect slide raft from the aircraft.</p> <p>(d) emergency evacuation slide drill</p> <p>(i) open armed exit with slide or slide raft deployment and inflation; and</p> <p>(ii) egress from aircraft via the evacuation slide and run away to a safe distance.</p>
<p>Initial aircraft ground training: flight crew</p>	<p><b>167.</b>(1) A person shall not serve nor shall an air operator certificate (AOC) holder use a person as a flight crew member unless that person has completed the initial ground training approved by the Authority for the aircraft type.</p> <p>(2) Initial aircraft ground training for flight crew members shall include the pertinent portions of the operations manuals relating to aircraft-specific performance, mass and balance, operational policies, systems, limitations, normal, abnormal and emergency procedures on the aircraft type to be used.</p> <p>(3) An AOC holder shall have an initial aircraft ground training curriculum for the flight crew applicable to the type of operations conducted and aircraft flown.</p> <p>(4) Instructions shall include at least the following general subjects-</p> <p>(a) AOC holder's dispatch, flight release, or operational control or flight following procedures;</p> <p>(b) principles and methods for determining mass and balance, and runway limitations for take-off;</p> <p>(c) adverse weather recognition and avoidance, and flight procedures which shall be followed when operating in the followed when operating in the following conditions-</p>

- (i) icing;
- (ii) fog;
- (iii) Turbulence;
- (iv) heavy precipitation;
- (v) thunderstorms;
- (vi) low-level wind shear and microburst;
- (vii) low visibility;
- (d) normal and emergency communications procedures and navigation equipment including the AOC holder's communications procedures and air traffic control clearance requirements;
- (e) navigation procedures used in area departure, en route, area arrival, approach and landing phases;
- (f) approved crew resource management (CRM) training;
- (g) air traffic control systems, procedures, and phraseology;
- (h) aircraft performance characteristics during all flight regimes, including-
  - (i) the use of charts, tables, tabulated data and other related manual information;
  - (ii) normal, abnormal, and emergency performance problems;
  - (iii) meteorological and weight limiting performance factors, such as temperature, pressure, contaminated runways, precipitation, climb and runway limits;
  - (iv) inoperative equipment performance limiting factors, such as minimum equipment list or configuration deviation list, inoperative antiskid; and
  - (v) special operational conditions, such as unpaved runways, high altitude aerodromes and drift down requirements.
- (5) An AOC holder shall have an initial aircraft ground training curriculum for the flight crew applicable to the type of operations conducted and aircraft flown, including at least the following aircraft systems-
  - (a) aircraft-
    - (i) aircraft dimensions, turning radius, panel layouts, cockpit and cabin configurations; and
    - (ii) other major systems and components or appliances of the aircraft;
  - (b) power plants-
    - (i) basic engine description;
    - (ii) engine thrust ratings;
    - (iii) engine components such as accessory drives, ignition, oil, fuel control, hydraulic, and bleed air features;
  - (c) electrical-
    - (i) sources of aircraft electrical power, such as engine driven

generators, auxilliary power unit (APU) generator, and external power;

- (ii) electrical buses;
- (iii) circuit breakers;
- (iv) aircraft battery;
- (v) standby power systems.

(d) hydraulic-

- (i) hydraulic reservoirs, pumps, accumulators, filters, check valves, interconnects and actuators;
- (ii) other hydraulically operated components.

(e) fuel-

- (i) fuel tanks, including location and quantities;
- (ii) engine driven pumps;
- (iii) boost pumps;
- (iv) system valves and crossfeeds;
- (v) quantity indicators;
- (vi) quantity indicators;
- (vii) provisions for fuel jettisoning;

(f) pneumatic-

- (i) bleed air sources, auxiliary power unit or external ground air;
- (ii) means of routing, venting and controlling bleed air via valves, ducts, chambers, and temperature and pressure limiting devices;

(g) air conditioning and pressurisation-

- (i) heaters, air conditioning packs, fans, and other environmental control devices;
- (ii) pressurisation system components such as outflow and negative pressure relief valves;
- (iii) automatic, standby, and manual pressurisation controls and annunciations;

(h) flight controls-

- (i) primary controls, including yaw, pitch, and roll devices;
- (ii) secondary controls, including leading or trailing edge devices, flaps, trim, and damping mechanisms;
- (iii) means of actuation, whether direct or indirect or fly by wire;
- (iv) redundancy devices;

(i) landing gear-

- (i) landing gear extension and retraction mechanism including the operating sequence of struts, doors, and locking devices, and brake and antiskid systems, if applicable;
- (ii) steering, including nose or body steering gear;
- (iii) bogie arrangements;
- (iv) air or ground sensor relays;
- (v) visual downlock indicators;

(j) ice and rain protection-

(i) rain removal systems; and  
(ii) anti-icing or de-icing systems affecting flight controls, engines,  
(iii) pitot static probes, fluid outlets, cockpit windows, and aircraft structures;

(k) equipment and furnishings-

(i) exits;  
(ii) galleys;  
(iii) water and waste systems;  
(iv) lavatories;  
(v) cargo areas;  
(vi) crew member and passenger seats;  
(vii) bulkheads;  
(viii) seating and cargo configurations;  
(ix) non-emergency equipment and furnishings;

(l) navigation equipment-

(i) flight directors;  
(ii) horizontal situation indicator;  
(iii) radio magnetic indicator;  
(iv) navigation receivers such as global positioning system, automatic direction finder (ADF), very high frequency omnidirectional radio range (VOR), OMEGA, long range navigation (LORAN-C), area navigation (RNAV), marker beacon, distance measuring equipment (DME);  
(v) inertial systems such as inertia navigation system (INS) and inertia reference (IRS);  
(vi) functional displays;  
(vii) fault indications and comparator systems;  
(viii) aircraft transponders;  
(ix) radio altimeters;  
(x) weather radar;  
(xi) cathode ray tube or computer generated displays of aircraft position and navigation information;

(m) auto flight system-

(i) autopilot;  
(ii) auto throttles;  
(iii) flight director and navigation systems;  
(iv) automatic approach tracking;  
(v) auto land;  
(vi) automatic fuel and performance management systems;

(n) flight instruments-

(i) panel arrangement;  
(ii) flight instruments, including attitude indicator, directional gyro, magnetic compass, airspeed indicator, vertical speed indicator, altimeters, standby instruments;

(iii) instrument power sources, and instrument sensory sources, such as pitot static pressure;

(o) display systems-

(i) weather radar;

(ii) other Cathode ray tube (CRT) displays, such as checklist, vertical navigation or longitudinal navigation displays;

(p) communication equipment-

(i) very high frequency (VHF) or high frequency (HF);

(ii) audio panels;

(iii) in flight interphone and passenger address systems;

(iv) voice recorder;

(v) aircraft communication addressing and reporting system (ACARS);

(q) warning systems-

(i) aural, visual, and tactile warning systems, including the character and degree of urgency related to each signal;

(ii) warning and caution annunciator systems, including ground proximity and take-off warning systems;

(r) fire protection-

(i) fire and overheat sensors, loops, modules, or other means of providing visual or aural indications of fire or overheat detection;

(ii) procedures for the use of fire handles, automatic extinguishing systems and extinguishing agents;

(iii) power sources necessary to provide protection for fire and overheat conditions in engines, auxiliary power unit, cargo bay or wheel well, cockpit, cabin and lavatories;

(s) oxygen-

(i) passenger, crew, and portable oxygen supply systems;

(ii) sources of oxygen such as gaseous or solid;

(iii) flow and distribution networks;

(iv) automatic deployment systems;

(v) regulators, pressure levels and gauges;

(vi) servicing requirements.

(t) lighting-

(i) cockpit, cabin, and external lighting systems;

(ii) power sources;

(iii) switch positions;

(iv) spare light bulb locations.

(u) lighting-

(i) cockpit, cabin, and external lighting systems;

(ii) power sources;

- (iii) switch positions;
- (iv) spare light bulb locations.
- (v) lighting-
  - (i) cockpit, cabin, and external lighting systems;
  - (ii) power sources;
  - (iii) switch positions;
  - (iv) spare light bulb locations;
- (w) emergency equipment-
  - (i) fire and oxygen bottles;
  - (ii) first aid kits;
  - (iii) life rafts and life preservers;
  - (iv) crash axes;
  - (v) emergency exits and lights;
  - (vi) slides and slide rafts;
  - (vii) escape straps or handles;
  - (viii) hatches, ladders and movable stairs;
- (v) auxiliary power unit-
  - (i) electric and bleed air capabilities;
  - (ii) interfaces with electrical and pneumatic systems;
  - (iii) inlet doors and exhaust ducts;
  - (iv) fuel supply;
- (6) An AOC holder shall have an initial aircraft ground training curriculum for the flight crew applicable to the type of operations conducted and aircraft flown, including at least the following aircraft systems integration items-
  - (a) use of checklist:
    - (i) safety chocks;
    - (ii) cockpit preparation (switch position and checklist flows);
    - (iii) checklist callouts and responses;
    - (iv) checklist sequence;
  - (b) flight planning:
    - (i) performance limitations, including meteorological, weight, minimum equipment list and configuration deviation list items;
    - (ii) required fuel loads;
    - (iii) weather planning, lower than standard take-off minimums or alternate requirements;
  - (c) navigation systems:
    - (i) pre-flight and operation of applicable receivers;
    - (ii) onboard navigation systems;
    - (iii) flight plan information input and retrieval;
  - (d) auto flight: autopilot, auto thrust, and flight director systems, including the appropriate procedures, normal and abnormal indications, and enunciators;

	<p>(e) cockpit familiarisation-</p> <p>(i) activation of aircraft system controls and switches to include normal, abnormal and emergency switches; and</p> <p>(ii) control positions and relevant enunciators, lights, or other caution and warning systems.</p> <p>(7) An AOC holder may have separate initial aircraft ground training curricula of varying lengths and subject emphasis which recognise the experience levels of a flight crew members approved by the Authority.</p>
<p>Initial aircraft ground training: cabin crew</p>	<p><b>168.</b>(1) A person shall not serve nor shall an air operator certificate (AOC) holder use a person as a cabin crew member unless that person has completed the initial ground training approved by the Authority for aircraft type.</p> <p>(2) Initial aircraft ground training for cabin crew members shall include the pertinent portions of the operations manuals relating to aircraft specific configuration, equipment, normal and emergency procedures for the aircraft types within the fleet.</p> <p>(3) An AOC holder shall have an initial ground training curriculum for cabin crew members applicable to the type of operations conducted and aircraft flown, including at least the following general subjects-</p> <p>(a) aircraft familiarisation-</p> <p>(i) aircraft characteristics and description;</p> <p>(ii) cockpit configuration;</p> <p>(iii) cabin configuration;</p> <p>(iv) galleys;</p> <p>(v) lavatories;</p> <p>(vi) stowage areas;</p> <p>(b) aircraft equipment and furnishings-</p> <p>(i) cabin crew member stations;</p> <p>(ii) cabin crew member panels;</p> <p>(iii) passenger seats;</p> <p>(iv) passenger service units and convenience panels;</p> <p>(v) passenger information signs;</p> <p>(vi) aircraft markings;</p> <p>(vii) aircraft placards;</p> <p>(c) aircraft systems-</p> <p>(i) air conditioning and pressurisation system;</p> <p>(ii) aircraft communication systems (call, interphone and passenger address);</p> <p>(iii) lighting and electrical systems;</p> <p>(iv) oxygen systems (flight crew, observer and passenger);</p> <p>(v) water system;</p> <p>(d) aircraft exits:</p> <p>(i) general information;</p> <p>(ii) exits with slides or slide rafts for pre-flight and normal operation;</p> <p>(iii) exits without slides pre-flight and normal operations;</p> <p>(iv) window exits;</p> <p>(e) crew member communication and coordination:</p> <p>(i) authority of pilot-in-command;</p> <p>(ii) routine communication signals and procedures;</p> <p>(iii) crew member briefing;</p>

- (f) routine crew member duties and procedures-
  - (i) crew member general responsibilities;
  - (ii) reporting duties and procedures for specific aircraft;
  - (iii) pre-departure duties and procedures prior to passenger boarding;
  - (iv) passenger boarding duties and procedures;
  - (v) prior-to-movement-on-the-surface duties and procedures;
  - (vi) prior-to-take-off duties and procedures applicable to specific aircraft;
  - (vii) in-flight duties and procedures;
  - (viii) prior-to-landing duties and procedures;
  - (ix) movement on the surface and arrival duties and procedures;
  - (x) after-arrival duties and procedures; and
  - (xi) intermediate stops.
- (g) passenger handling responsibilities:
  - (i) crew member general responsibilities;
  - (ii) infants, children, and unaccompanied minors;
  - (iii) passengers needing special assistance;
  - (iv) passengers needing special accommodation;
  - (v) carry-on stowage requirements;
  - (vi) passenger seating requirements;
  - (vii) smoking and no-smoking requirements and;
  - (viii) approved Crew Resource Management (CRM) training.
- (4) An AOC holder shall have an initial ground training curriculum for cabin crew members applicable to the type of operations conducted and aircraft flown, including at least the following aircraft specific emergency subjects-
  - (a) emergency equipment:
    - (i) emergency communication and notification systems;
    - (ii) aircraft exits;
    - (iii) exits with slides or slide rafts, emergency operation;
    - (iv) slides and slide rafts in a ditching;
    - (v) exits without slides emergency operation;
    - (vi) window exits emergency operation;
    - (vii) exits with tail cones (emergency operation);
    - (viii) cockpit exits emergency operation;
    - (ix) ground evacuation and ditching equipment;
    - (x) first-aid equipment;
    - (xi) portable oxygen systems, oxygen bottles, chemical oxygen generators, protective breathing equipment;
    - (xii) fire-fighting equipment;
    - (xiii) emergency lighting systems; and
    - (xiv) additional emergency equipment.
  - (b) emergency assignments and procedures:

- (i) general types of emergencies specific to aircraft;
- (ii) emergency communication signals and procedures;
- (iii) rapid decompression;
- (iv) insidious decompression and cracked window and pressure seal leaks;
- (v) fires;
- (vi) ditching;
- (vii) ground evacuation;
- (viii) unwarranted evacuation for example, passenger initiated;
- (ix) illness or injury;
- (x) abnormal situations involving passengers or crew members;
- (xi) unlawful interference;
- (xii) bomb threat;
- (xiii) turbulence;
- (xiv) other unusual situations; and
- (xv) previous aircraft accidents and incidents; and
- (c) aircraft specific emergency drills:
  - (i) emergency exit drill;
  - (ii) hand fire extinguisher drill;
  - (iii) emergency oxygen system drill;
  - (iv) flotation device drill;
  - (v) ditching drill, if applicable;
  - (vi) life raft removal and inflation drill, if applicable;
  - (vii) slide raft pack transfer drill, if applicable;
  - (viii) slide or slide raft deployment, inflation, and detachment drill, if applicable; and
  - (ix) emergency evacuation slide drill, if applicable.
- (5) An AOC holder shall ensure that initial ground training for cabin crew members include a competence check to determine that person's ability to perform assigned duties and responsibilities.
- (6) An AOC holder shall ensure that initial ground training for cabin crew members consists of at least the following programmed hours of instruction-
  - (a) multi-engine turbine: thirty two hours; and
  - (b) multi-engine reciprocating: sixteen hours.
- (7) An operator shall ensure that a training programme is completed by all persons before being assigned as a cabin crew member.
- (8) Cabin crew members shall complete a recurrent training programme annually.
- (9) The training programmes 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

	<p>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;</p> <p>(c) 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;</p> <p>(d) aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin; and</p> <p>(e) knowledgeable about human performance as related to passenger cabin safety duties including flight crew-cabin crew coordination.</p>
<p>Competence checks: cabin crew members</p>	<p><b>169.</b>(1) A person shall not serve nor shall any AOC holder use a person as a cabin crew member unless, within the preceding twelve months before that service, that person has passed the competency check approved by the Authority performing the emergency duties appropriate to that person's assignment.</p> <p>(2) Evaluators shall conduct competency checks for cabin crew members to demonstrate that the candidate's proficiency level is sufficient to successfully perform assigned duties and responsibilities.</p> <p>(3) A qualified supervisor or inspector approved by the Authority shall observe and evaluate competency checks for cabin crew members.</p> <p>(4) Evaluators shall include during each cabin crew member competency check a demonstrated knowledge of-</p> <p>(a) emergency equipment: emergency communication and notification systems;</p> <p>(i) aircraft exits;</p> <p>(ii) exits with slides or slide rafts (emergency operation);</p> <p>(iii) slides and slide rafts in a ditching;</p> <p>(iv) exits without slides (emergency operation);</p> <p>(v) window exits (emergency operation); exits with tail cones (emergency operation);</p> <p>(vi) cockpit exits (emergency operation);</p> <p>(vii) ground evacuation and ditching equipment;</p> <p>(viii) first-aid equipment;</p> <p>(ix) portable oxygen systems (oxygen bottles, chemical oxygen generators, protective breathing equipment (PBE));</p> <p>(x) fire-fighting equipment;</p> <p>(xi) emergency lighting systems;</p> <p>(xii) additional emergency equipment.</p> <p>(b) emergency procedures-</p> <p>(i) general types of emergencies specific to aircraft;</p> <p>(ii) emergency communication signals and procedures;</p>

	<ul style="list-style-type: none"> <li>(iii) rapid decompression;</li> <li>(iv) insidious decompression and cracked window and pressure seal leaks;</li> <li>(v) fires;</li> <li>(vi) ditching;</li> <li>(vii) ground evacuation;</li> <li>(viii) unwarranted evacuation, for example that is passenger initiated;</li> <li>(ix) illness or injury;</li> <li>(x) abnormal situations involving passengers or crew members;</li> <li>(xi) turbulence;</li> <li>(xii) other unusual situations;</li> <li>(c) emergency drills- <ul style="list-style-type: none"> <li>(i) location and use of all emergency and safety equipment carried on the aircraft;</li> <li>(ii) the location and use of all types of exits;</li> <li>(iii) actual donning of a lifejacket where fitted;</li> <li>(iv) actual donning of protective breathing equipment;</li> <li>(v) actual handling of fire extinguishers;</li> </ul> </li> <li>(d) crew resource management: <ul style="list-style-type: none"> <li>(i) decision making skills-</li> <li>(ii) briefings and developing open communication;</li> <li>(iii) inquiry, advocacy, and assertion training;</li> <li>(iv) workload management;</li> </ul> </li> <li>(e) dangerous goods <ul style="list-style-type: none"> <li>(i) recognition of and transportation of dangerous goods;</li> <li>(ii) proper packaging, marking, and documentation; and</li> <li>(iii) instructions regarding compatibility, loading, storage and handling characteristics;</li> </ul> </li> <li>(f) security- <ul style="list-style-type: none"> <li>(i) unlawful interference; and</li> <li>(ii) disruptive passengers.</li> </ul> </li> </ul> <p>(5) An operator shall establish and maintain a cabin crew training programme that is designed to ensure that persons who receive training acquire the competency to perform their assigned duties and includes or makes reference to a syllabus for the training programme in the company operations manual. The training programme should include Human Factors training.</p>
<p>Initial training: flight operations</p>	<p><b>170.</b>(1) A person shall not serve nor shall any air operator certificate (AOC) holder use a person as a flight operations officer unless that person has completed the initial training approved by the Authority.</p> <p>(2) Aircraft initial flight operations officer training shall include the pertinent portions of the</p>

<p>officer</p>	<p>operations manual relating to aircraft specific flight preparation procedures, performance, mass and balance, systems, limitations for the aircraft types within the fleet.</p> <p>(3) An AOC holder shall provide initial aircraft training for flight operations officers that include instruction in at least the following general dispatch subjects-</p> <ul style="list-style-type: none"> <li>(a) normal and emergency communications procedures;</li> <li>(b) available sources of weather information;</li> <li>(c) actual and prognostic weather charts;</li> <li>(d) interpretation of weather information;</li> <li>(e) adverse weather phenomena, such as clear air turbulence, wind shear, and thunderstorms;</li> <li>(f) Notice to Airmen (NOTAM) system;</li> <li>(g) navigational charts and publications;</li> <li>(h) air traffic control and instrument flight rules procedures;</li> <li>(i) familiarisation with operational area;</li> <li>(j) characteristics of special aerodromes and other operationally significant aerodromes which the operator uses, such as terrain, approach aids, or prevailing weather phenomena;</li> <li>(k) joint flight operations officer and group responsibilities; and</li> <li>(l) approved crew resource management (CRM) training for flight operations officers.</li> </ul> <p>(4) An AOC holder shall provide initial aircraft training for flight operations officers that include instruction in at least the following aircraft characteristics</p> <ul style="list-style-type: none"> <li>(a) general operating characteristics of the AOC holder's aircraft;</li> <li>(b) aircraft specific training with emphasis on the following topics- <ul style="list-style-type: none"> <li>(i) aircraft operating and performance characteristics;</li> <li>(ii) navigation equipment;</li> <li>(iii) instrument approach and communications equipment; and</li> <li>(iv) emergency equipment.</li> </ul> </li> <li>(c) flight manual training; and</li> <li>(d) equipment training.</li> </ul> <p>(5) An AOC holder shall provide initial aircraft training for flight operations officers that include instruction in at least the following emergency procedures</p> <ul style="list-style-type: none"> <li>(a) assisting the flight crew in an emergency; and</li> <li>(b) alerting of appropriate governmental, company and private agencies.</li> </ul> <p>(6) An AOC holder shall ensure that initial ground training for flight operations officers includes a competence check given by an appropriate supervisor or ground instructor that demonstrates the required knowledge and abilities.</p>
<p>Initial flight training: flight crew member</p>	<p><b>171.</b>(1) A person shall not serve nor shall an air operator certificate (AOC) holder use a person as a flight crew member unless that person has completed the initial flight training approved by the Authority for the aircraft type.</p> <p>(2) Initial flight training of a flight crew member shall focus on the manoeuvring and safe operation of the aircraft in accordance with AOC holder's normal, abnormal and emergency procedures.</p> <p>(3) An AOC holder may have separate initial flight training curriculum which recognise the experience levels of flight crew members approved by the Authority.</p> <p>(4) Flight training may be conducted in an appropriate aircraft or adequate synthetic flight trainer:</p> <ul style="list-style-type: none"> <li>(a) having landing capability; and</li> </ul>

(b) qualified for training or checking on circling manoeuvres.

(5) An AOC holder shall ensure that pilot initial flight training includes at least the following-

(a) preparation-

- (i) visual inspection, and use authorised of pictorial display for aircraft with a flight engineer, ;
- (ii) pre-taxi procedures;
- (iii) performance limitations;

(b) surface operation:

- (i) pushback;
- (ii) powerback taxi, if applicable to type of operation to be conducted;
- (iii) starting;
- (iv) taxi;
- (v) pre-take-off checks;

(c) take-off-

- (vi) normal;
- (vii) crosswind;
- (viii) rejected;
- (ix) power failure after v1;
- (x) lower than standard minimum, if applicable to type of operation to be conducted;

(d) climb-

- (i) normal;
- (ii) one-engine inoperative during climb to en route altitude;

(e) en-route-

- (i) steep turns;
- (ii) approaches to stalls (take-off, en route, and landing configurations);in
- (iii) flight power plant shutdown;
- (iv) in-flight power plant restart;
- (v) in-flight power plant restart;
- (vi) high speed handling characteristics;

(f) descent:

- (i) normal;
- (ii) maximum rate.

(g) approaches:

- (i) visual flight rules (VFR) procedures;
- (ii) visual approach with 50% loss of power on one-engine (2 engines inoperative on 3-engine aircraft for pilot-in-command only);
- (iii) visual approach with slat or flap malfunction;
- (iv) instrument flight rules (IFR) precision approaches such as instrument landing system normal and instrument landing system with one-engine inoperative;
- (v) IFR non-precision approaches non-directional radio beacon (NDB) normal and VHF omni-directional radio range beacon (VOR) normal;
- (vi) non-precision approach with one engine inoperative (Localizer

backcourse procedures, SDF or localizer type directional aid, a global positioning system, TACAN and circling approach procedures);

- (vii) missed approach from precision approach;
- (viii) missed approach from non-precision approach; and
- (ix) missed approach with engine failure;

(h) landings-

- (i) normal with a pitch mis-trim (small aircraft only);
- (ii) normal from precision instrument approach;
- (iii) normal from precision instrument approach with most critical engine inoperative;
- (iv) normal with 50% loss of power on one side (2 engines inoperative on 3-engine aircraft);
- (v) normal with flap or slat malfunction;
- (vi) rejected landings;
- (vii) crosswind;
- (viii) manual reversion or degraded control augmentation;
- (ix) short or soft field small aircraft, land amphibian aircraft only;

and

- (x) glassy or rough water, seaplanes only.

(i) after landing:

- (i) parking;
- (ii) emergency evacuation;
- (iii) docking, mooring, and ramping, seaplanes only;
- (iv)

(j) other flight procedures during any airborne phase:

- (i) holding;
- (ii) ice accumulation on airframe;
- (iii) air hazard avoidance;
- (iv) wind shear or microburst;

(k) normal, abnormal and alternate systems procedures during any phase-

- (i) pneumatic or pressurisation;
- (ii) air conditioning;
- (iii) fuel and oil;
- (iv) electrical;
- (v) hydraulic;
- (vi) flight controls;
- (vii) anti-icing and de-icing systems;
- (viii) autopilot;
- (ix) flight management guidance systems and automatic or other approach and landing aids;
- (x) stall warning devices, stall avoidance devices, and stability augmentation systems;
- (xi) airborne weather radar;

	<p>(xii) flight instrument system malfunction;  (xiii) communications equipment;  (xiv) navigation systems;  (l) emergency systems procedures during any phase-  (i) aircraft fires;  (ii) smoke control;  (iii) power plant malfunctions;  (iv) fuel jettison;  (v) electrical, hydraulic, pneumatic systems;  (vi) flight control system malfunction; and  (vii) landing gear and flap system malfunction.  (m) procedures for upset prevention and recovery training in a flight simulation training device as contained in the Procedures for Air Navigation Services.”  (6) An AOC holder shall ensure that flight engineer training includes at least the following-  (a) training and practice in procedures related to the carrying out of flight engineer duties and functions, where this training and practice may be accomplished either in flight or, in a synthetic flight trainer;  (b) training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, human performance including threat and error management and in the transport of dangerous goods; and  (c) a proficiency check as specified in Regulation ---.</p>
<p>Initial specialised operations training</p>	<p><b>172.</b>(1) A person shall not serve nor shall any AOC holder use a person as a flight crew member unless that person has completed the appropriate initial specialised operations training curriculum approved by the Authority.  (2) Specialised operations for which initial training curricula shall be developed include-  (a) low minima operations, including low visibility take-offs and Category II and III operations;  (b) extended range operations;  (c) specialised navigation; and  (d) pilot-in-command right seat qualification.  (3) An AOC holder shall provide initial specialised operations training to ensure that each pilot and flight operations officer is qualified in the type of operation in which that person serves and in any specialised or new equipment, procedures, and techniques, such as-  (a) Class II navigation-  (i) knowledge of specialised navigation procedures, such as Required Navigation Performance (RNP), Minimum Navigation Performance System (MNPS) and Reduced Vertical Separation Minimum (RVSM); and  (ii) knowledge of specialised equipment, such as Inertia Navigation System (INS), Long Range Navigation (LORAN), OMEGA;  (b) Category II and CAT III operations approaches-</p>

	<ul style="list-style-type: none"> <li>(i) special equipment, procedures and practice;</li> <li>(ii) a demonstration of competency;</li> <li>(c) lower than standard minimum take-offs- <ul style="list-style-type: none"> <li>(i) runway and lighting requirements;</li> <li>(ii) rejected take-offs at or near V1 with a failure of the most critical engine;</li> <li>(iii) taxi operations;</li> <li>(iv) procedures to prevent runway incursions under low visibility conditions;</li> </ul> </li> <li>(d) extended range operations with two turbine engine aeroplanes-</li> <li>(e) airborne radar approaches; and</li> <li>(f) autopilot instead of co-pilot.</li> </ul>
<p>Aircraft differences training</p>	<p><b>173.</b>(1) A person shall not serve nor shall an AOC holder use a person as a crew member on an aircraft of a type for which a differences curriculum is included in the AOC holder's approved training programme, unless that person has satisfactorily completed that curriculum, with respect to both the crew member position and the particular variant of that aircraft.</p> <p>(2) An operator shall ensure that a crew member completes-</p> <ul style="list-style-type: none"> <li>(a) differences training which requires additional knowledge and training on an appropriate training device or the aircraft- <ul style="list-style-type: none"> <li>(i) when operating another variant of an aircraft of the same type or another type of the same class currently operated; or</li> <li>(ii) when changing equipment procedures on types or variants currently operated;</li> </ul> </li> <li>(b) familiarisation training which requires the acquisition of additional knowledge- <ul style="list-style-type: none"> <li>(i) when operating another aircraft of the same type; or</li> <li>(ii) when changing equipment procedures on types of variants currently operated; and</li> </ul> </li> <li>(c) the operator referred to in sub-regulation (1) shall specify in the operations manual when such differences training or familiarization training is required.</li> </ul> <p>(3) An AOC holder shall provide aircraft differences training for flight operations officers when the operator has aircraft variances within the same type of aircraft, which includes at least the following-</p> <ul style="list-style-type: none"> <li>(a) operations procedures;- <ul style="list-style-type: none"> <li>(i) operations under adverse weather phenomena conditions, including clear air turbulence, wind shear, and thunderstorms;</li> <li>(ii) mass and balance computations and load control procedures;</li> <li>(iii) aircraft performance computations, to include take-off mass limitations based on departure runway, arrival runway, and en - route limitations, and also engine-out limitations;</li> <li>(iv) flight planning procedures, to include route selection, flight time, and fuel requirements analysis;</li> <li>(v) dispatch release preparation;</li> <li>(vi) crew briefings;</li> <li>(vii) flight monitoring procedures;</li> <li>(viii) flight crew response to various emergency situations, including the assistance the aircraft flight operations officer can provide in each situation;</li> </ul> </li> </ul>

	<p>(ix) minimum equipment list and configuration deviation list procedures;</p> <p>(x) manual performance of required procedures in case of the loss of automated capabilities;</p> <p>(xi) training in appropriate geographic areas;</p> <p>(xii) air traffic control and instrument flight rules procedures, to include ground hold and central flow control procedures; and</p> <p>(xiii) radiotelephony procedures; and</p> <p>(b) emergency procedures-</p> <p>(i) actions taken to aid the flight crew; and</p> <p>(ii) AOC holder and Authority notification.</p>
<p>Use of synthetic flight trainers</p>	<p><b>174.</b>A synthetic flight trainer that is used for flight crew member qualification shall-</p> <p>(a) be specifically approved by the Authority for the-</p> <p>(i) air operator certificate holder;</p> <p>(ii) type aircraft, including type variations, for which the training or check is being conducted; and</p> <p>(iii) particular manoeuvre, procedure, or flight crew member function involved;</p> <p>(b) maintain the performance, functional, and other characteristics that are required for approval;</p> <p>(c) be modified to conform with any modification to the aircraft being simulated that results in changes to performance, functional, or other characteristics required for approval;</p> <p>(d) be given a daily functional pre-flight check before use;</p> <p>(e) have a daily discrepancy logbook kept by the appropriate instructor or check pilot at the end of each training or check flight; and</p> <p>(f) for initial aircraft type training, be qualified for training and checking on the circling manoeuvre.</p>
<p>Aircraft and instrument proficiency checks</p>	<p><b>175.</b>(1) A person shall not serve nor shall any AOC holder use a person as a pilot flight crew member unless, since the beginning of the sixth calendar month before that service, that person has passed the proficiency check prescribed by the Authority in the make and model of aircraft on which their services are required.</p> <p>(2) A person shall not serve nor shall any AOC holder use a person as a flight crew member in instrument flight rules operations unless, from the beginning of the sixth calendar month before that service, that pilot has passed the instrument competency check prescribed by the Authority.</p> <p>(3) A flight crew member may complete the requirements of sub-regulations (1) and (2) of this regulation simultaneously in a make and model of the aircraft.</p> <p>(4) The completion of an approved operator training programme for the particular aircraft type and the satisfactory completion of a PIC</p>

	<p>proficiency check, shall satisfy the requirement for an aircraft type rating practical test provided that the proficiency check-</p> <ul style="list-style-type: none"><li>(a) includes all manoeuvres and procedures required for a type rating practical test; and</li><li>(b) is conducted by an examiner.</li></ul> <p>(5) Aircraft and instrument proficiency checks for PIC and co-pilot shall include the following operations and procedures listed in Table 6.</p>
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TABLE 6 – INSTRUMENT PROFICIENCY CHECK

TYPE OF OPERATION OR PROCEDURE	PIC or Co-Pilot	Notes
<b>Ground Operations</b>		
Preflight inspection	PIC/Co-Pilot	
Taxiing	PIC/Co-Pilot	Both pilots may take simultaneous credit.
Powerplant checks	PIC/Co-Pilot	Both pilots may take simultaneous credit.
<b>Take-offs</b>		
Normal	PIC/Co-Pilot	
Instrument	PIC/Co-Pilot	
Crosswind	PIC/Co-Pilot	
With powerplant failure	PIC/Co-Pilot	
Rejected take-off	PIC/Co-Pilot	Both pilots may take simultaneous credit. May be waived.
<b>Instrument Procedures</b>		
Area departure	PIC/Co-Pilot	May be waived.
Area arrival	PIC/Co-Pilot	May be waived.
Holding	PIC/Co-Pilot	May be waived.
Normal ILS approach	PIC/Co-Pilot	
Engine-out ILS	PIC/Co-Pilot	
Coupled ILS approach	PIC/Co-Pilot	Both pilots may take simultaneous credit

Nonprecision approach	PIC/Co-Pilot	
Second nonprecision approach	PIC/Co-Pilot	
Missed approach from an ILS	PIC/Co-Pilot	
Second missed approach	PIC only	
Circling approach	PIC/Co-Pilot	Only when authorized in the AOC holder's Operations Manual. May be waived.
<b>Inflight Maneuvers</b>		
Steep turns	PIC only	May be waived.
Specific flight characteristics	PIC/Co-Pilot	
Approaches to stalls	PIC/Co-Pilot	May be waived.
Powerplant failure	PIC/Co-Pilot	
2 engine inoperative approach (3 and 4 engine aircraft)	PIC/Co-Pilot	
Normal landing	PIC/Co-Pilot	
Landing from an ILS	PIC/Co-Pilot	
Crosswind landing	PIC/Co-Pilot	
Landing with engine-out	PIC/Co-Pilot	
Landing from circling approach	PIC/Co-Pilot	Only if authorized in Operations Manual. May be waived.
Normal And Non-Normal Procedures	PIC/Co-Pilot	
Rejected landing	PIC/Co-Pilot	
2 engine inoperative landing (3 and 4 engine aircraft)	PIC only	
Other Events	PIC or Co-Pilot	Examiner's discretion.

- (6) Examiners or check pilots may waive certain events on the proficiency check based on an assessment of the pilot's demonstrated level of performance.
- (7) The oral and flight phases of a proficiency check should not be conducted simultaneously.
- (8) When the examiner or check pilot determines that a pilot's performance is unsatisfactory, the examiner or check pilot may terminate the immediately.
- (9) If the proficiency check must be terminated for mechanical or other reasons, and there are events which still need to be repeated, the examiner or check pilot shall issue a letter of discontinuance, valid for sixty days, listing the specific areas of operation that have been successfully completed.

	<p>(10) At least one of the two annual proficiency checks shall be conducted by an examiner.</p> <p>(11) The other proficiency check may be conducted by a check pilot or the Authority.</p>
Introduction of new equipment or procedures	<p><b>176.</b> A person shall not serve or an AOC holder shall not use any other person as a flight crew unless such person attend the AOC holder's approved training programme to both the crew member position and the particular variant of that aircraft.</p>
Flight engineer proficiency checks	<p><b>177.</b>(1) A person shall not serve nor shall any AOC holder use a person as a flight engineer on an aircraft unless within the preceding twelve calendar months he has:</p> <p>(a) had a proficiency check in accordance with the requirements prescribed by the Authority; or</p> <p>(b) 50 hours flight time for the AOC holder as flight engineer in the type aircraft</p> <p>(2) Examiners shall include during proficiency checks for flight engineers an oral or written examination of the normal, abnormal, and emergency procedures listed below-</p> <p>(a) normal procedures</p> <p>(i) interior pre-flight;</p> <p>(ii) panel set-up;</p> <p>(iii) fuel load;</p> <p>(iv) engine start procedures;</p> <p>(v) taxi and before take-off procedures;</p> <p>(vi) take-off and climb pressurization;</p> <p>(vii) cruise and fuel management;</p> <p>(viii) descent and approach;</p> <p>(ix) after landing and securing;</p> <p>(x) crew coordination;</p> <p>(xi) situational awareness;</p> <p>(xii) performance computations;</p> <p>(xiii) anti-ice and de-ice measures;</p> <p>(b) abnormal and emergency procedures-</p> <p>(i) troubleshooting;</p> <p>(ii) knowledge of checklist;</p> <p>(iii) crew coordination;</p> <p>(iv) minimum equipment list (MEL);</p> <p>(v) configuration deviation list (CDL); and</p> <p>(vi) emergency or alternate operation of aircraft flight systems.</p>
Competence checks: flight operations officer.	<p><b>178.</b>(1) A person shall not serve nor shall any AOC holder use an other person as a flight operations officer unless, within the preceding twelve months before that service, such person passed the competency check, approved by the Authority, performing the flight preparation and subsequent duties appropriate to that person's assignment.</p> <p>(2) Evaluators of the flight operations officer referred to under sub-regulation (1) shall conduct competency checks for flight operations officers to demonstrate that the candidate's proficiency level is sufficient to ensure the successful outcome of all dispatch operations.</p> <p>(3) An authorized person shall observe and evaluate competency checks for</p>

	<p>flight operations officers.</p> <p>(4) Each competency check for flight operations officers shall include  (a) an evaluation of all aspects of the dispatch function;  (b) a demonstration of the knowledge and abilities in normal and abnormal situations; and  (c) an observation of actual flights being dispatched.</p> <p>(5) An evaluator of newly hired flight operations officer shall include during initial competency checks, an evaluation of all of geographic areas and types of aircraft the flight operations officer shall be qualified to dispatch.</p> <p>(6) The authorized person may approve a competency check of representative aircraft types when, in his judgement, a check including all types is impractical or unnecessary.</p> <p>(7) Evaluators may limit initial equipment and transition competency checks solely to the dispatch of the types of aircraft on which the flight operations officer is qualifying, unless the check is to simultaneously count as a recurrent check</p> <p>(8) An evaluator of flight operations officers shall include, during recurrent and re-qualification competency checks, a representative sample of aircraft and routes for which the flight operations officers maintains current qualification.</p> <p>(9) A flight operations officer shall not qualify in extended diversion time operations (EDTO) or other special operations authorised by the Authority unless that flight operations officer submits special operations competency checks to the Authority</p>
Supervised line flying: pilots	<p><b>179.</b>(1) A pilot initially qualifying as a PIC shall complete a minimum of ten flights performing the duties of a PIC under the supervision of an check pilot.</p> <p>(2) A PIC transitioning to a new aircraft type shall complete a minimum of five flights performing the duties of a PIC under the supervision of an check pilot.</p> <p>(3) A pilot qualifying for duties other than PIC shall complete a minimum of five flights performing those duties under the supervision of an check pilot.</p> <p>(4) During the time that a qualifying PIC is acquiring operating experience, an authorised instructor who is also serving as the PIC shall occupy a co-pilot station.</p> <p>(5) In the case of a transitioning PIC, the check pilot serving as PIC may occupy the observer's seat if the transitioning pilot has made at least two take-offs and landings in the type aircraft used, and has satisfactorily demonstrated to the authorized instructor that he is qualified to perform the duties of a PIC for that type of aircraft.</p>
Supervised line flying: flight engineers.	<p><b>180.</b>A flight engineer who has qualified on a new type rating on an aircraft shall perform the functions of a flight engineer for a minimum of five flights under the supervision of a flight instructor or qualified flight engineer approved by the air operator certificate holder and accepted by the Authority</p>

Supervised line experience: cabin crew.	<p><b>181.</b>A person training as a cabin crew member shall-</p> <p>(a) perform the functions of a cabin crew member for a minimum of two flights under the supervision of a cabin crew instructor; and</p> <p>(b) not serve as a required crew member.</p>
Line observations: flight operations officer.	<p><b>182.</b>A person shall not serve nor shall any air operator certificate holder use a person as a flight operations officer unless within the preceding twelve months before that service, that person has observed, in the cockpit, the conduct of two complete flights over routes representative of those for which that person is assigned duties.</p>
Route and area checks: pilot qualification	<p><b>183.</b>(1) A person shall not serve nor shall any AOC holder use a person as a pilot unless, within the preceding twelve months, that person has passed a route check in which the person satisfactorily performed his assigned duties in one of the types of aircraft he is to fly.</p> <p>(2) A person shall not perform PIC duties over a designated special operational area that requires a special navigation system or procedures or in EDTO operations unless his competency with the system and procedures has been demonstrated to the AOC holder within the past twelve months.</p> <p>(3) A PIC of an aircraft shall demonstrate special operational competency by navigation over the route or area as PIC under the supervision of a check pilot on an annual basis by demonstrating a knowledge of-</p> <p>(a) the terrain and minimum safe altitudes;</p> <p>(b) the seasonal meteorological conditions;</p> <p>(c) the search and rescue procedures;</p> <p>(d) the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place;</p> <p>(e) procedures applicable to flight paths over heavily populated areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, and applicable operating minima; and</p> <p>(f) the meteorological, communication and air traffic facilities, services and procedures.</p>
Low minimums authorisation: PIC	<p><b>184.</b>Where a PIC has not completed-</p> <p>(a) fifteen flights performing PIC duties in an aircraft type, including five approaches to landing using Category I or II operations procedures, that PIC shall not plan for or initiate an instrument approach when the ceiling is less than 300 feet and the visibility is less than 2000 m; and</p> <p>(b) twenty flights performing PIC duties in an aircraft including five approaches and landing using Category III operations procedures, that PIC shall not plan for or initiate an approach when the ceiling is less than 100 feet or the visibility is less than 400 m runway visual range (RVR).</p>
Designated special aerodromes and heliports: PIC qualification	<p><b>185.</b>(1) The Authority may determine that certain aerodromes, due to items such as surrounding terrain obstructions, or complex approach or departure procedures are special airport qualifications and that certain areas or routes, or both require a special type of navigation qualification.</p> <p>(2) A person shall not serve nor shall any AOC holder use a person as PIC for operations at special airport qualifications aerodromes unless within the preceding twelve months the PIC:</p>

	<p>(a) has been qualified by the AOC holder through a pictorial means acceptable to the Authority for that aerodrome; or</p> <p>(b) the assigned co-pilot has made a take-off and landing at that aerodrome or while serving as a flight crew member for the AOC holder.</p>
<p>Designated special airport qualifications aerodrome limitations</p>	<p><b>186.</b>(1) Designated special airport qualifications aerodrome limitations are not applicable if the operation occurs-</p> <p>(a) during daylight hours;</p> <p>(b) when the visibility is at least 5 km; and</p> <p>(c) when the ceiling at that aerodrome is at least 1,000 feet above the lowest initial approach altitude prescribed for an instrument approach procedure.</p>
<p>Recurrent training and checking: flight crew members</p>	<p><b>187.</b>(1) An operator shall ensure that-</p> <p>(a) a flight crew member undergoes recurrent training listed in sub-regulation (2) and checking in sub-regulation (3) and that all such training and checking is relevant to the type or variant of aircraft on which the flight crew member operates; and</p> <p>(b) a recurrent training and checking programme is established in the operations manual and approved by the Authority.</p> <p>(2) Recurrent training referred to in sub-regulation (1) shall be conducted by the following personnel:</p> <p>(a) ground and refresher training: by suitably qualified personnel;</p> <p>(b) aeroplane synthetic flight trainer training: by an authorized instructor or in the case of the synthetic flight trainer content schedule, a synthetic flight trainer authorized instructor provided that the authorized instructor or synthetic flight trainer authorized instructor satisfied the operator's experience and knowledge requirements sufficient to instruct on the items specified in the operations manual;</p> <p>(c) emergency and safety equipment training: by suitably qualified personnel;</p> <p>(d) crew resource management training: by suitably qualified personnel to integrate elements of crew resource management into all phases of recurrent training; and</p> <p>(e) modular crew resource management training: by at least one Crew Resource Management (CRM) trainer acceptable to the Authority who may be assisted by experts in order to address specific areas.</p> <p>(3) The recurrent checking referred to in sub-regulation (1) shall be conducted by the following personnel-</p> <p>(a) operator proficiency check: by a check pilot or flight engineer authorized by the AOC holder and accepted by the Authority, as appropriate, or, if the check is conducted in a synthetic flight trainer training device, by check pilot or authorized flight engineer as appropriate; or</p> <p>(b) line checks: by a check pilot of the operator and acceptable to the Authority; and</p> <p>(c) emergency and safety equipment checking by suitably qualified personnel acceptable to the Authority.</p> <p>(4) The period of validity of an operator proficiency check shall be-</p> <p>(a) six months in addition to the remainder of the month of issue; or</p> <p>(b) if issued within the final three months of validity of a previous operator proficiency</p>

	<p>check, extended from the date of issue until six months from the expiry date of that previous operator proficiency check.</p> <p>(5) An operator shall ensure that each flight crew member undergoes a line check on the aircraft to demonstrate his competence in carrying out normal line operations described in the operations manual.</p> <p>(6) The period of validity of a line check referred to in sub-regulation shall be-</p> <p>(a) twelve months, in addition to the remainder of the month of issue; or</p> <p>(b) if issued within the final three months of validity of a previous line check, extended from the date of issue until twelve months from the expiry date of that previous check.</p> <p>(7) An operator shall ensure that each flight crew member undergoes training and checking on the location and use of emergency and safety equipment carried.</p> <p>(8) The period of validity of an emergency and safety equipment check referred to in sub-regulation (7) shall be-</p> <p>(a) twelve months in addition to the remainder of the month of issue; or</p> <p>(b) if issued within the final three months of validity of a previous emergency and safety check, extended from the date of issue until twelve months from the expiry date of the previous emergency and safety equipment check.</p> <p>(9) An operator shall ensure-</p> <p>(a) elements of CRM are integrated into all appropriate phases of the recurrent training; and</p> <p>(b) a flight crew member undergoes specific modular CRM training and all major topics of CRM training shall be covered over a period not exceeding three years.</p> <p>(10) An operator shall ensure that each flight crew member undergoes-</p> <p>(a) ground and refresher training at least every twelve months, if the training is conducted within three months prior to the expiry of the twelve months period, the next ground and refresher training must be completed within twelve months of the original expiry date of the previous ground and refresher training; and</p> <p>(b) aircraft training or synthetic flight trainer training at least every six months, if the training is conducted within three months prior to the expiry of the twelve months period, the next aircraft or synthetic flight trainer training must be completed within six months of the original expiry date of the previous aircraft or synthetic flight trainer training.</p>
<p>Recurrent training: cabin crew members</p>	<p><b>188.</b>(1) An operator shall ensure-</p> <p>(a) a cabin crew member undergoes recurrent training, covering the actions assigned to each cabin crew member in normal and emergency procedures and drills relevant to the type or variant of aircraft on which they operate as specified in this regulation; and</p> <p>(b) the recurrent training and checking programme, approved by the Authority includes theoretical and practical instruction together with individual practice as provided in this regulation.</p> <p>(2) The period of validity of recurrent training and the associated checking required by this regulation shall be twelve months in addition to the remainder of three-month of issue.</p> <p>(3) If issued within the final three calendar months of validity of a previous check, the period of validity shall extend from the date of issue until twelve months from the expiry date of that</p>

	<p>previous check.</p> <p>(4) An operator shall ensure-</p> <p>(a) recurrent training required under this regulation is conducted by suitably qualified persons;</p> <p>(b) ensure that every twelve months, the programme of practical training includes the following-</p> <p>(i) emergency procedures including pilot incapacitation;</p> <p>(ii) evacuation procedures including crowd control techniques;</p> <p>(iii) touch-drills by each cabin crew member for opening normal and emergency exits for passenger evacuation;</p> <p>(iv) the location and handling of emergency equipment, including oxygen systems, and the donning by each cabin crew member of lifejackets, portable oxygen and protective breathing equipment;</p> <p>(v) first aid and the contents of the first aid kit;</p> <p>(vi) stowage of articles in the cabin;</p> <p>(vii) security procedures;</p> <p>(viii) incident and accident review; and</p> <p>(ix) crew resource management;</p> <p>(c) at intervals not exceeding three years, recurrent training for cabin crew members also includes-</p> <p>(i) the operation and actual opening of all normal and emergency exits for passenger evacuation in an aeroplane or representative training device;</p> <p>(ii) demonstration of the operation of all other exits including cock pit windows;</p> <p>(iii) the training of cabin crew member undergoing realistic and practical training in the use of all fire-fighting equipment, including protective clothing, representative of that carried in the aeroplane shall include-</p> <p>(aa) each cabin crew member extinguishing a fire characteristic of an aeroplane interior fire except that, in the case of Halon extinguishers, an alternative extinguishing agent may be used; and</p> <p>(bb) the donning and use of protective breathing equipment by each cabin crew member in an enclosed, simulated smoke-filled environment.</p> <p>(iv) use of pyrotechnics, actual or representative devices; and</p> <p>(v) demonstration of the use of the life-raft, or slide-raft, where fitted.</p> <p>(d) all appropriate requirements in these regulations are included in the training of cabin crew members.</p>
<p>Recurrent training: flight operations officers</p>	<p><b>189.1)</b> A person shall not serve nor shall AOC holder use a person as a flight operations officer unless within the preceding twelve months that person has completed the recurrent ground curricula approved by the Authority.</p> <p>(2) An AOC holder shall-</p> <p>(a) establish and maintain a recurrent training programme, approved by the Authority and established in the AOC holder's operations manual, to be completed annually by each flight operations officer;</p> <p>(b) conduct all recurrent training, of flight operations officers, by suitably qualified personnel;</p> <p>(c) ensure that, every twelve months, each flight operations officer receive recurrent training in at least the following:</p> <p>(i) aircraft-specific flight preparation;</p> <p>(ii) emergency assistance to flight crews;</p>

	<p>(iii) crew resource management; and</p> <p>(iv) recognition and transportation of dangerous goods; and</p> <p>(d) may administer each of the recurrent ground and flight training curricula concurrently or intermixed, but shall record completion of each of these curricula separately.</p> <p>(3) A flight operations officer shall undergo recurrent training relevant to the type or variant of aircraft and operations conducted by the AOC holder.</p>
<p>Check pilot training</p>	<p><b>190.</b>(1) A person shall not serve nor shall any AOC holder use a person as a check pilot in an aircraft or check pilot in a synthetic flight trainer in a training programme unless, with respect to the aircraft type involved, that person has satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required to serve as pilot-in-command PIC .</p> <p>(2) An AOC holder shall ensure that initial ground training for check pilots includes-</p> <ul style="list-style-type: none"> <li>(a) check pilot duties, functions, and responsibilities;</li> <li>(b) applicable regulations and the AOC holder's policies and procedures;</li> <li>(c) appropriate methods, procedures, and techniques for conducting the required checks;</li> <li>(d) proper evaluation of student performance including the detection of- <ul style="list-style-type: none"> <li>(i) improper and insufficient training;</li> <li>(ii) personal characteristics of an applicant that could adversely affect safety;</li> </ul> </li> <li>(e) appropriate corrective action in the case of unsatisfactory checks; and</li> <li>(f) approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aircraft.</li> </ul> <p>(3) Transition ground training for all check pilots shall include the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures applicable to the aircraft to which the check pilot is in transition.</p> <p>(4) An AOC holder shall ensure that the initial and transition flight training for check pilots in an aircraft include-</p> <ul style="list-style-type: none"> <li>(a) training and practice in conducting flight evaluations, from the left and right pilot seats for pilot check pilots in the required normal, abnormal, and emergency procedures to ensure competence to conduct the flight checks;</li> <li>(b) the potential results of improper, untimely, or non-execution of safety measures during an evaluation; and</li> <li>(c) the safety measures, to be taken from either pilot seat for pilot check pilots, for emergency situations that are likely to develop during an evaluation.</li> <li>(d) training and practice in conducting flight checks in the required normal, abnormal, and emergency procedures to ensure competence to conduct the evaluations checks required by this regulation; and</li> <li>(e) training in the operation of synthetic flight trainers to ensure competence to conduct the evaluations required by this regulation.</li> </ul> <p>(5) An AOC holder shall accomplish flight training for check pilot in full or in part in an aircraft, in flight in a synthetic flight trainer, as appropriate.</p>

<p>Authorised instructor or synthetic flight trainer and authorised instructor training</p>	<p><b>191.</b>(1) A person shall not serve nor shall any AOC holder use a person as an authorised instructor or a synthetic flight trainer authorised instructor in a training programme unless-</p> <p>(a) that person has satisfactorily completed initial or transition authorized instructor or a synthetic flight trainer authorised instructor training, as appropriate; and</p> <p>(b) within the preceding twenty four months, that person satisfactorily conducts instruction under the observation of an authorized person, an AOC holder’s check pilot, an authorised flight engineer, as appropriate, or an examiner employed by the AOC holder.</p> <p>(2) An AOC holder shall:</p> <p>(a) accomplish the observation check for a authorized instructor or a synthetic flight trainer authorised instructor, in part or in full, in an aircraft, or a synthetic flight trainer; as appropriate;</p> <p>(b) ensure that initial ground training for an authorised instructor and synthetic flight trainer authorised instructor includes the following-</p> <p>(i) the duties, functions, and responsibilities;</p> <p>(ii) applicable regulations and the AOC holder's policies and procedures;</p> <p>(iii) appropriate methods, procedures, and techniques for conducting the required checks;</p> <p>(iv) proper evaluation of trainee performance including the detection of-</p> <p>(aa) improper and insufficient training; and</p> <p>(bb) personal characteristics of an applicant that could adversely affect safety;</p> <p>(v) appropriate corrective action in the case of unsatisfactory checks;</p> <p>(vi) approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aircraft; and</p> <p>(vii) except for holders of a flight instructor licence-</p> <p>(aa) the fundamental principles of the teaching-learning process;</p> <p>(bb) teaching methods and procedures; and</p> <p>(cc) the instructor-trainee relationship.</p> <p>(c) ensure that the transition ground training for an authorised instructor and synthetic flight trainer authorised instructor includes the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures applicable to the aircraft to which the authorised instructor is in transition.</p> <p>(d) ensure that the initial and transition flight training for an authorized instructor and synthetic flight trainer authorised instructor includes the following-</p> <p>(i) the safety measures for emergency situations that are likely to develop during instruction</p> <p>(ii) the potential results of improper, untimely, or non-execution of safety measures during instruction;</p> <p>(iii)for pilot authorised instructor</p> <p>(aa) in-flight training and practice in conducting flight instruction from the left and right pilot seats in the required normal, abnormal, and emergency procedures to ensure competence as an instructor; and</p> <p>(bb) the safety measures to be taken from either pilot seat for emergency situations that are likely to develop during instruction; and</p> <p>(iv)for authorised flight engineer instructor , in-flight training to ensure competence to perform assigned duties.</p> <p>(e) accomplish the flight training requirements for an authorised instructor in full or in part in an aircraft, in flight or in a synthetic flight trainer;</p> <p>(f) ensure that the initial and transition flight training for synthetic flight trainer authorised</p>
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	<p>instructor includes the following-</p> <ul style="list-style-type: none"> <li>(i) training and practice in the required normal, abnormal, and emergency procedures to ensure competence to conduct the flight instruction required by this regulation, where the training and practice are accomplished in full or in part in a synthetic flight trainer; and</li> <li>(ii) training in the operation of synthetic flight trainers, to ensure competence to conduct the flight instruction required by this regulation.</li> </ul>
<p>Authorised instructor qualifications</p>	<p><b>192.</b>An AOC holder shall not use a person nor shall any person serve as an instructor in an established training programme unless, with respect to the aircraft type involved, that person-</p> <ul style="list-style-type: none"> <li>(a) holds licences and ratings required to serve as a PIC or a flight engineer;</li> <li>(b) has satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a PIC or a flight engineer, as applicable;</li> <li>(c) has satisfactorily completed the appropriate proficiency, competency and recency of experience checks that are required to serve as a PIC or a flight engineer, as applicable;</li> <li>(d) has satisfactorily completed the applicable initial or transitional training requirements and the Authority-observed in-flight competency check; and</li> <li>(e) holds a Class 1 medical certificate.</li> </ul>
<p>Check pilot and authorised flight engineer qualifications</p>	<p><b>193.</b>An air operator certificate (AOC) holder shall not use a person, nor shall any person serve as a check pilot or an flight engineer authorised by the AOC holder and accepted by the Authority in an established training programme unless, with respect to the aircraft type involved, that person-</p> <ul style="list-style-type: none"> <li>(a) holds the pilot licences and ratings required to serve as PIC or a flight engineer;</li> <li>(b) has satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a PIC or a flight engineer;</li> <li>(c) has satisfactorily completed the appropriate proficiency, competency and recency of experience checks that are required to serve as a PIC or a flight engineer;</li> <li>(d) has satisfactorily completed the applicable initial or transitional training requirements and the Authority-observed in-flight competency check;</li> <li>(e) holds Class I or II medical certificate as may be applicable; and</li> <li>(f) has been approved by the Authority for the check pilot or authorised flight engineer duties involved as applicable.</li> </ul>
<p>Check pilot designation, authorizations and limitations</p>	<p><b>194.</b>(1) A person shall not serve nor shall any AOC holder use a person as a check pilot for:</p> <ul style="list-style-type: none"> <li>(a) any flight check unless that person has been designated by name for specified function by the Authority within the preceding twelve months;</li> <li>(b) for any check- <ul style="list-style-type: none"> <li>(i) in an aircraft as a required flight crew member unless that person holds the required flight crew licence and ratings and has completed for the AOC holder all applicable training, qualification and currency requirements under these Regulations applicable to the crew position and the flight operations being checked;</li> <li>(ii) in an aircraft as an observer check pilot unless that person holds the pilot licences and ratings and has completed all applicable training, qualification and line observation requirements under these Regulations applicable to the position and the flight operations being checked; or</li> <li>(iii) in a synthetic flight trainer unless that person has completed or observed with the AOC holder all training, qualification and line observation requirements under these Regulations applicable to the position and flight operations being checked.</li> </ul> </li> </ul> <p>(2) For purposes of sub-regulation (1), a check pilot shall be authorized to-</p> <ul style="list-style-type: none"> <li>(a) conduct proficiency or competency checks, line checks, and special qualification checks;</li> </ul>

	<p>(b) supervise the re-establishment of landing currency; and</p> <p>(c) supervise any initial operating experience requirements prescribed by the regulations or the Authority.</p>
Synthetic flight trainer approval	<p><b>195.</b>An AOC holder shall not use a synthetic flight trainer for-</p> <p>(a) training or checking unless that synthetic flight trainer has been specifically approved for the AOC holder in writing by the Authority; or</p> <p>(b) any purpose other than that specified in the Authority's approval.</p>
Line qualification: check pilot and instructor	<p><b>196.</b>A person shall not serve nor shall any air operator certificate holder use a person as a check pilot or synthetic flight trainer instructor unless, within the preceding twelve months before that service, that person has-</p> <p>(a) flown at least five flights as a required flight crew member for the type of aircraft involved; or</p> <p>(b) observed, in the cockpit, the conduct of two complete flights in the aircraft type to which the person is assigned.</p>
Termination of a proficiency, competence or line check	<p>An air operator certificate holder shall not use a crew member or flight operations officer in whose check was terminated in commercial air transport operations until the completion of a satisfactory recheck of that crew member or flight operations officer has been carried out.</p>
Recording of crew member qualifications	<p><b>197.</b>(1) The air operator certificate holder shall record and maintain for each crew member and flight operations officer, a record of each test and check as required by these Regulations.</p> <p>(2) A pilot may complete the curricula required by these Regulations concurrently or intermixed with other required curricula, but completion of each of these curricula shall be recorded separately.</p>
Monitoring of training and checking activities	<p><b>198.</b>(1) An AOC holder shall forward to the Authority, at least five working days prior to the scheduled activity, the dates, location, reporting times and report of all-</p> <p>(a) training for which a curriculum is approved in the AOC holder's training programme; and</p> <p>(b) proficiency, competence and line checks. so as to enable adequate supervision of its training and checking activities,</p> <p>(2) Failure to provide the information in sub-regulation (1) may invalidate the training or check and the Authority may require that it be repeated for observation purposes.</p>
Eligibility period	<p><b>199.</b>(1) A crew member who is required to take a proficiency check, a test or competency check, or recurrent training to maintain qualification for commercial air transport operations shall complete those requirements at any time during the eligibility period.</p> <p>(2) The eligibility period is defined as the three month period including the month prior, the month due, and the month after any due date specified by these Regulations.</p> <p>(3) Completion of the requirement at any time during the period shall be considered as completed in the month due for calculation of the next due date.</p>

PART IX- FLIGHT FLIGHT DISPATCHER	OPERATIONS	OFFICER/
<p>Flight operations officer/flight dispatcher</p> <p>Persons qualified in flight release</p>	<p><b>200.</b> ( 1) An Operator engaging flight operations officers/ flight dispatchers employed in conjunction with an approved method of control and supervision of flight operations shall be licensed in accordance with the provisions of Civil Aviation (Personnel Licensing) Regulations, .</p> <p>A person shall not act as a flight operations officer in releasing a scheduled passenger-carrying commercial air transport operation aircraft unless that person holds a flight operations officer licence or an Airline Transport Pilot Licence, and is currently qualified by the air operator certificate holder for the operation and type of aircraft used.</p> <p>(2) In accepting proof of qualifications other than the option of holding of a flight operations officer/flight dispatcher license, 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 license.</p> <p>(2) A flight operations officer/flight dispatcher shall not be assigned to duty unless that person has:</p> <ul style="list-style-type: none"> <li>(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 of these regulations;</li> <li>(b) made, within the preceding 12 months, at least two qualification flights in the flight crew compartment of an aeroplane over any area for which that individual is authorized to exercise flight supervision and the flight should include landings at as many aerodromes as practicable;</li> <li>(c) demonstrated to the operator a knowledge of: <ul style="list-style-type: none"> <li>(i) the contents of the operations manual ;</li> <li>(ii) the radio equipment in the aeroplanes used; and</li> <li>(iii) the navigation equipment in the aeroplanes used;</li> </ul> </li> <li>(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: <ul style="list-style-type: none"> <li>(i) the seasonal meteorological conditions and the sources of meteorological information;</li> <li>(ii) the effects of meteorological conditions on radio reception in the aeroplanes used;</li> <li>(iii) the peculiarities and limitations of each navigation system which is used by the operation; and</li> <li>(iv) the aeroplane loading instructions;</li> </ul> </li> <li>(e) demonstrated to the operator knowledge and skills related to human performance relevant to dispatch duties; and</li> <li>(f) demonstrated to the operator the ability to perform the duties specified in regulation 46 of these regulations.</li> </ul> <p>(4) A flight operations officer/flight dispatcher assigned to duty shall maintain complete familiarization with all features of the operation which are pertinent to such duties, including knowledge and skills related to human performance.</p> <p>5) A flight operations officer/flight dispatcher shall not be assigned to duty after 12 consecutive months of absence from such duty, unless the provisions of this regulation are met.</p>	

Company procedures indoctrination	<p><b>201.</b>(1) A person shall not serve nor shall an air operator certificate (AOC) holder use a person as a crew member or flight operations officer unless that person has completed the company procedures indoctrination curriculum approved by the Authority, which shall include a complete review of operations manual procedures pertinent to the crew member or flight operation officer's duties.</p> <p>(2) An AOC holder shall ensure that all operations personnel are provided with company indoctrination training that covers the following areas-</p> <p>. (a) AOC holder's organisation, scope of operation, and administrative practices as applicable to crew member assignments and duties;</p> <p>(b) appropriate provisions of civil aviation regulations and other applicable regulations and guidance materials;</p> <p>(c) AOC holder policies and procedures;</p> <p>(d) applicable crew member manuals; and</p> <p>(e) appropriate portions of the AOC holder's operations manual.</p> <p>(3) An AOC holder shall provide a minimum of forty programmed hours of instruction for basic indoctrination training unless a reduction of the hours of instruction is approved by the Authority.</p>
	<p>PART X-</p> <p>MANUALS, LOGS AND RECORDS</p>
Flight manual	<p><b>202.</b>(1) An operator shall ensure that a flight manual contains the information specified in Civil Aviation (Airworthiness) Regulations.</p> <p>(2) The flight manual shall be updated by implementing changes made mandatory by the Authority.</p>
Operator's maintenance control manual	<p><b>203.</b> (1) The operator's maintenance control manual provided in accordance with regulation 60, which may be issued in separate parts, shall contain the following information:</p> <p>(a) a description of the procedures required by these regulations including, when applicable:</p> <p>(i) a description of the administrative arrangements between the operator and the approved maintenance organization;</p> <p>(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.</p> <p>(b) names and duties of the qualified person or persons required by regulation 59 of these regulations;</p> <p>(c) a reference to the maintenance programme required by regulation 61 of these regulations;</p> <p>(d) [until 4 November 2020,] a description of the methods used for the completion and retention of the operator's maintenance records required by regulation 62;</p> <p>(e) [as of 5 November 2020,] a description of the methods used for the completion and retention of the operator's continuing</p>

	<p>airworthiness/maintenance records required by regulation 62;</p> <ul style="list-style-type: none"> <li>(f) a description of the procedures for monitoring, assessing and reporting maintenance and operational experience required by regulation 63;</li> <li>(g) a description of the procedures for complying with the service information reporting requirements of the regulations governing airworthiness regulations;</li> <li>(h) a description of procedures for assessing continuing airworthiness information and implementing any resulting actions, as required by regulation 63;</li> <li>(i) a description of the procedures for implementing action resulting from mandatory continuing airworthiness information;</li> <li>(j) 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;</li> <li>(k) a description of aircraft types and models to which the manual applies;</li> <li>(l) a description of procedures for ensuring that unserviceability's affecting airworthiness are recorded and rectified; and</li> <li>(m) a description of the procedures for advising the Authority of significant in-service occurrences.</li> </ul>
Maintenance programme	<p><b>204.</b> (1) An operator shall ensure that maintenance programme for each aeroplane as required by regulation 61 contains the following information:</p> <ul style="list-style-type: none"> <li>a) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aeroplane;</li> <li>b) when applicable, a continuing structural integrity programme;</li> <li>c) procedures for changing or deviating from paragraphs a) and b) above; and</li> <li>d) when applicable, condition monitoring and reliability programme descriptions for aircraft systems, components and engines.</li> </ul> <p>(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.</p> <p>(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.</p> <p>(4) Electronic Aircraft Maintenance Records (EAMR) may be used in accordance with the Civil Aviation (Approved Maintenance Organization) Regulations that address the existence and use of EAMR digital and other paperless forms of maintenance records.</p>
Journey log book	<p><b>205.</b> (1) An aeroplane journey log book shall contain the following items and the corresponding roman numerals:</p> <ul style="list-style-type: none"> <li>I — Aeroplane nationality and registration.</li> <li>II — Date.</li> <li>III — Names of crew members.</li> <li>IV — Duty assignments of crew members.</li> <li>V — Place of departure.</li> <li>VI - Place of arrival.</li> <li>VII - Time of departure.</li> <li>VIII - Time of arrival.</li> <li>IX - Hours of flight.</li> <li>X - Nature of flight (private, aerial work, scheduled or non-scheduled).</li> <li>XI - Incidents, observations, if any.</li> <li>XII - Signature of person in charge.</li> </ul> <p>(2) Entries in the journey log book shall be made currently and in ink or indelible pencil.</p>

	(3) Completed journey log book shall be retained to provide a continuous record of the last [two years] of operations.
Records of emergency and survival equipment carried	<p><b>206.</b> (1) Operators shall at all times have available for immediate communication to rescue coordination centers, lists containing information on the emergency and survival equipment carried on board any of their aeroplanes engaged in air navigation.</p> <p>(2) The information shall include, as applicable, the number, color 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.</p>
Portable electronic devices	<p><b>207.</b>A PIC or any other crew member shall not permit any person to use, nor shall any person use a portable electronic device on board an aircraft that may adversely affect the performance of aircraft systems and equipment unless-</p> <p>(a) for IFR operations other than commercial air transport, the PIC allows such a device prior to its use; or</p> <p>(b) for commercial air transport operations, the AOC holder makes a determination of acceptable devices and publishes that information in the Operations Manual for the crew members use; and</p> <p>(c) the PIC informs passengers of the permitted use.</p>
Flight recorder records	<p><b>208.</b>The Operator shall ensure that-</p> <p>(a) to the extent possible, in the event the aeroplane 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 the Civil Aviation (Aircraft Accident and Incident Investigation) Regulations;</p> <p>(b) All aeroplanes of a maximum take-off mass of over 27 000 kg for which the application for type certification is submitted to a Contracting State [on or after 1 January 2023] are equipped with a crash-protected flight recorder which shall record the information displayed to the flight crew from electronic displays, as well as the operation of switches and selectors by the flight crew.</p> <p>(c) All aeroplanes of a maximum take-off mass of over 5 700 kg, up to and including 27 000 kg, for which the application for type certification is submitted to a Contracting State [on or after 1 January 2023] are equipped with a crash-protected flight recorder which should record the information displayed to the flight crew from electronic displays, as well as the operation of switches and selectors by the flight crew;</p> <p>(d) The minimum flight crew-machine interface recording duration shall be at least for the last two hours.</p> <p>(e) Flight crew-machine interface recordings are able to be correlated to the recorded cockpit audio.</p>
<b>PART XI CABIN CREW</b>	
Assignment of emergency duties	<p><b>209.</b>(1) The operator shall establish, to the satisfaction of the Authority, the minimum number of cabin crew required for each type of aeroplane, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aeroplane, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation..</p> <p>(2) The operator shall assign the functions referred to in sub regulation (1) for each type of aeroplane.</p>

Cabin crew at emergency evacuation stations	<b>210.</b> Each cabin crew member assigned to emergency evacuation duties shall occupy a seat provided in accordance with regulation 50 of the Civil Aviation(Instruments and Equipment) Regulation of these regulations during take-off and landing and whenever the pilot-in-command so directs.
Arming of automatic emergency exits.	<b>211.</b> A person shall not cause an aircraft carrying passengers to be moved on the surface, take-off or land unless each automatically deployable emergency evacuation assisting means installed on the aircraft is ready for evacuation.
Accessibility of emergency exits and equipment	<b>212.</b> A person shall not allow carry-on baggage or other items to block access to the emergency exits when the aircraft is moving on the surface, during take-off or landing, or while passengers remain on board.
Stops where passengers remain on board	<p><b>213.</b>A PIC shall ensure that where passengers remain on board the aircraft-</p> <p>(a) all engines are shut down;</p> <p>(b) at least one floor level exit remains open to provide for the evacuation of passengers where necessary; and</p> <p>(c) there is at least one person who is qualified in the emergency evacuation of the aircraft and who has been identified to the passengers on board as responsible for the passenger safety is immediately available.</p> <p>(2) Where refuelling with passengers on board, the PIC or a designated AOC holder’s representative shall ensure that the AOC holder’s operations manual procedures are followed.</p>
Protection of cabin crew during flight	<b>214.</b> 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	<p><b>215.</b>(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.</p> <p>(2) Cabin crew members shall complete a recurrent training Programme annually.</p> <p>(3) The training programs established in terms of sub regulation (1) shall ensure that each person is:</p> <p>a) competent to execute those safety duties and functions which the cabin crew member is assigned to perform in the event of an emergency or in a situation requiring emergency evacuation;</p> <p>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;</p> <p>c) when serving on aeroplanes operated above 3 000 m (10 000 ft), knowledgeable as regards the effect of lack of oxygen and, in the case of pressurized aeroplanes, as regards physiological</p>

	<p>phenomena accompanying a loss of pressurization;</p> <p>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;</p> <p>e) aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin; and</p> <p>f) knowledgeable about human performance as related to passenger cabin safety duties including flight crew-cabin crew coordination.</p>
	<p>PART XII</p> <p>SECURITY</p>
Security of the flight crew compartment	<p><b>216.</b>(1) In all aeroplanes which are equipped with a flight crew compartment door, the flight crew compartment door shall be capable of being locked, and means shall be provided by which cabin crew can discreetly notify the flight crew in the event of suspicious activity or security breaches in the cabin.</p>
	<p>(2) All passenger-carrying aeroplanes:</p> <p>(a) of a maximum certificated take-off mass in excess of 54 500 kg; or</p> <p>(b) of a maximum certificated take-off mass in excess of 45 500 kg with a passenger seating capacity greater than 19; or</p> <p>(c) with a passenger seating capacity greater than 60,</p> <p>shall be equipped with an approved flight crew compartment door that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons, and the door shall be capable of being locked and unlocked from either pilot's station.</p>
	<p>(3) In all aeroplanes which are equipped with a flight crew compartment door in accordance with sub regulation (2)-</p> <p>(a) the door shall be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and</p> <p>(b) means shall be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behavior or potential threat.</p>
	<p>(4) All passenger-carrying aeroplanes shall be equipped with an approved flight crew compartment door, where practicable, that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons., and the door shall be capable of being locked and unlocked from either pilot's station.</p>
	<p>( )</p>
	<p>(6) In all aero planes which are equipped with a flight crew compartment door in accordance With these regulations-</p> <p>(a) the door should be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and</p> <p>(b) means should be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat.</p>
Aeroplane search procedure checklist	<p><b>217.</b> (1) The 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 and for inspecting aeroplanes for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the aeroplane may be the object of an act of unlawful interference.</p>
	<p>(2) The checklist shall be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb</p>

	location specific to the aeroplane.
Training programmes	<p><b>218.</b>(1) The Operator shall establish and maintain an approved security training programme which ensures crew members act in the most appropriate manner to minimize the consequences of acts of unlawful interference.</p> <p>(2) As a minimum, approved security training programme shall include the following elements:</p> <ul style="list-style-type: none"> <li>(a) determination of the seriousness of any occurrence</li> <li>(b) crew communication and coordination;</li> <li>(c) appropriate self-defense responses</li> <li>(d) use of non-lethal protective devices assigned to crew members whose use is authorized by the Authority;</li> <li>(e) understanding of behaviour of terrorists so as to facilitate the ability of crew members to cope with hijacker behaviour and passenger responses;</li> <li>(f) live situational training exercises regarding various threat conditions;</li> <li>(g) flight crew compartment procedures to protect the aeroplane; and</li> <li>(h) aeroplane search procedures and guidance on least-risk bomb locations where practicable.</li> </ul> <p>(3) 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 an aeroplane so that they contribute to the prevention of acts of sabotage or other forms of unlawful interference.</p>
Reporting acts of unlawful interference	<b>219.</b> 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.
Miscellaneous	<p><b>220.</b> (1) Specialized means of attenuating and directing the blast shall be provided for use at the Least-risk bomb location.</p> <p>(2) Where the Operator accepts the carriage of weapons removed from passengers, the aeroplane shall have provision for stowing such weapons in a place so that they are inaccessible to any person during flight time.</p>
<b>PART XIII</b>	
<b>DANGEROUS GOODS</b>	
Operators with no operational approval to transport dangerous goods as cargo	<p><b>221.</b>(1) The Authority shall ensure that Operators not approved to transport dangerous goods have:</p> <ul style="list-style-type: none"> <li>a) established a dangerous goods training programme that meets - <ul style="list-style-type: none"> <li>(i) [the requirements of the dangerous goods regulations,]</li> <li>(ii) the applicable requirements of the Technical Instructions, as appropriate and details of the dangerous goods training programme,</li> </ul> </li> </ul> <p>shall be included in the operator's operations manuals;</p> <ul style="list-style-type: none"> <li>b) established dangerous goods policies and procedures in its operations manual to meet, at a minimum, the requirements of the [dangerous goods regulations] and the Technical Instructions to allow operator personnel to: <ul style="list-style-type: none"> <li>i) identify and reject undeclared dangerous goods, including COMAT classified as dangerous goods; and</li> <li>ii) report to the appropriate authorities of the Authority and the State in which it occurred any: <ul style="list-style-type: none"> <li>a) occasions when undeclared dangerous goods are discovered in cargo or mail; and</li> <li>b) dangerous goods accidents and incidents.</li> </ul> </li> </ul> </li> </ul>
Operators transporting	<b>222.</b> (1) The Authority shall approve the transport of dangerous goods and ensure that the Operator:

dangerous goods as cargo	<p>a) establishes a dangerous goods training programme that meets the requirements in the Technical Instructions, and the requirements of the [State regulations], as appropriate.</p> <p>b) Details of the dangerous goods training programme shall be included in the operator's operations manuals;</p> <p>c) establishes dangerous goods policies and procedures in its operations manual to meet, at a minimum, the requirements of [dangerous goods regulations], the Technical Instructions and the [State's regulations] to enable operator personnel to:</p> <p>(i) identify and reject undeclared or misdeclared dangerous goods, including COMAT classified as dangerous goods;</p> <p>(ii) report to the appropriate authorities of the Authority and the State in which it occurred any:</p> <p>(aa) occasions when undeclared or misdeclared dangerous goods are discovered in cargo or mail; and</p> <p>(bb) dangerous goods accidents and incidents;</p> <p>d) report to the appropriate authorities of the Authority and the State of Origin any occasions when dangerous goods are discovered to have been carried;</p> <p>(i) when not loaded, segregated, separated or secured in accordance with the Technical Instructions,; and</p> <p>(ii) information having been provided to the pilot-in-command;</p> <p>e) accept, handle, store, transport, load and unload dangerous goods, including COMAT classified as dangerous goods as cargo on board an aircraft; and</p> <p>f) provide the pilot-in-command with accurate and legible written or printed information concerning dangerous goods that are to be carried as cargo.</p>
Provision of information	<b>223.</b> The operator shall ensure that all personnel, including third-party personnel, involved in the acceptance, handling, loading and unloading of cargo are informed of the operator's operational approval and limitations with regard to the transport of dangerous goods.
[MISCELLANIOUS PROVISIONS]	
Exemptions	
Offences and penalties	
revocation	
Repeal and savings	

FIRST SCHEDULE.

(made under regulation .....)

LIGHTS TO BE DISPLAYED BY AEROPLANES

1. TERMINOLOGY

When the following terms are used in this Schedule, they have the following meanings:

*Angles of coverage.*

a) Angle of coverage A is formed by two intersecting vertical planes making angles of 70 degrees to the right and 70 degrees to the left respectively, looking aft along the longitudinal axis to a vertical plane passing through the longitudinal axis.

b) Angle of coverage F is formed by two intersecting vertical planes making angles of 110 degrees to the right and 110 degrees to the left respectively, looking forward along the longitudinal axis to a vertical plane passing through the longitudinal axis.

c) Angle of coverage L is formed by two intersecting vertical planes, one parallel to the longitudinal axis of the aeroplane, and the other 110 degrees to the left of the first, when looking forward along the longitudinal axis.

d) Angle of coverage R is formed by two intersecting vertical planes, one parallel to the longitudinal axis of the aeroplane, and the other 110 degrees to the right of the first, when looking forward along the longitudinal axis.

*Horizontal plane.* The plane containing the longitudinal axis and perpendicular to the plane of symmetry of the aeroplane.

*Longitudinal axis of the aeroplane.* A selected axis parallel to the direction of flight at a normal cruising speed, and passing through the center of gravity of the aeroplane.

*Making way.* An aeroplane on the surface of the water is “making way” when it is under way and has a velocity relative to the water.

*Under command.* An aeroplane on the surface of the water is “under command” when it is able to execute maneuvers as required by the International Regulations for Preventing Collisions at Sea for the purpose of avoiding other vessels.

*Under way.* An aeroplane on the surface of the water is “under way” when it is not aground or moored to the ground or to any fixed object on the land or in the water.

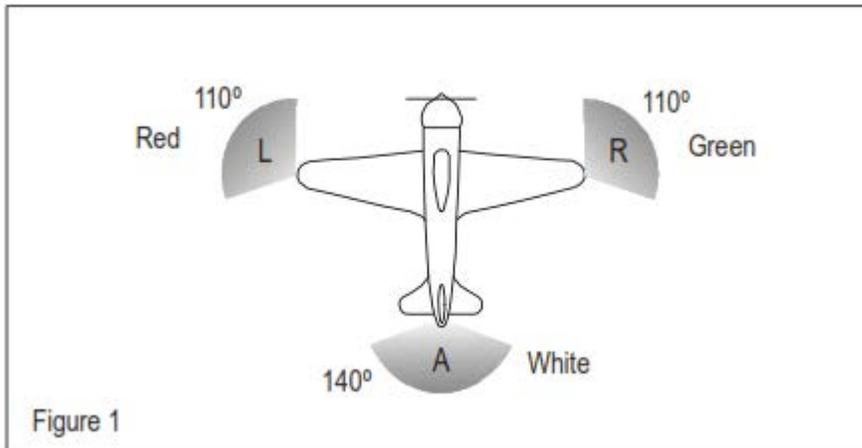
*Vertical planes.* Planes perpendicular to the horizontal plane.

*Visible.* Visible on a dark night with a clear atmosphere.

## 2. NAVIGATION LIGHTS TO BE DISPLAYED IN THE AIR

As illustrated in Figure 1, the following unobstructed navigation lights shall be displayed:

- a) a red light projected above and below the horizontal plane through angle of coverage L;
- b) a green light projected above and below the horizontal plane through angle of coverage R;
- c) a white light projected above and below the horizontal plane rearward through angle of coverage A.



### 3. LIGHTS TO BE DISPLAYED ON THE WATER

#### 3.1 General

The International Regulations for Preventing Collisions at Sea require different lights to be displayed in each of the following circumstances:

- a) when under way;
- b) when towing another vessel or aeroplane;
- c) when being towed;
- d) when not under command and not making way;
- e) when making way but not under command;
- f) when at anchor;
- g) when aground.

The lights required by aeroplanes in each case are described below.

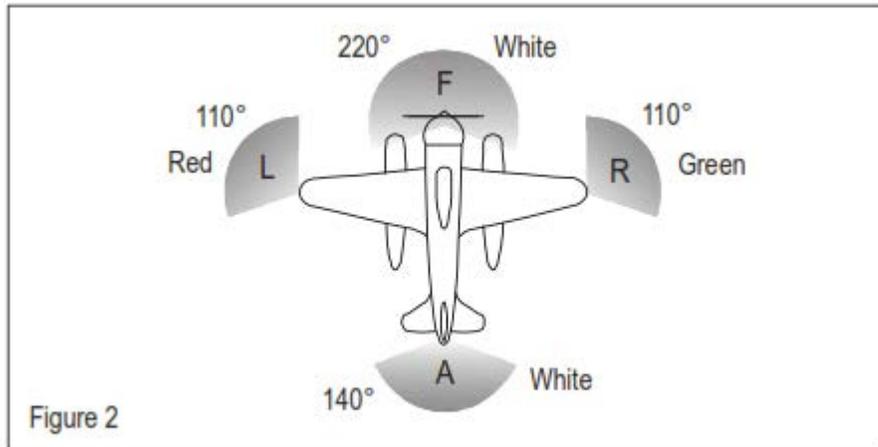
#### 3.2 When under way

As illustrated in Figure 2, the following appearing as steady unobstructed lights:

- a) a red light projected above and below the horizontal through angle of coverage L;
- b) a green light projected above and below the horizontal through angle of coverage R;
- c) a white light projected above and below the horizontal through angle of coverage A; and
- d) a white light projected through angle of coverage F.

The lights described in 3.2 a), b) and c) should be visible at a distance of at least 3.7 km (2 NM). The light described in 3.2 d) should be visible at a distance of 9.3 km (5 NM) when fitted to an aeroplane of

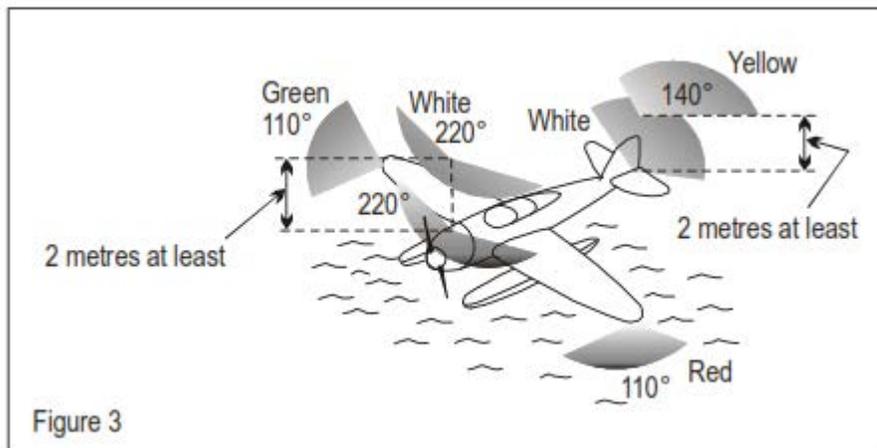
20 m or more in length or visible at a distance of 5.6 km (3 NM) when fitted to an aeroplane of less than 20 m in length.



### 3.3 When towing another vessel or aeroplane

As illustrated in Figure 3, the following appearing as steady, unobstructed lights:

- a) the lights described in 3.2;
- b) a second light having the same characteristics as the light described in 3.2 d) and mounted in a vertical line at least 2 m above or below it; and
- c) a yellow light having otherwise the same characteristics as the light described in 3.2 c) and mounted in a vertical line at least 2 m above it.



### 3.4 When being towed

The lights described in 3.2 a), b) and c) appearing as steady, unobstructed lights.

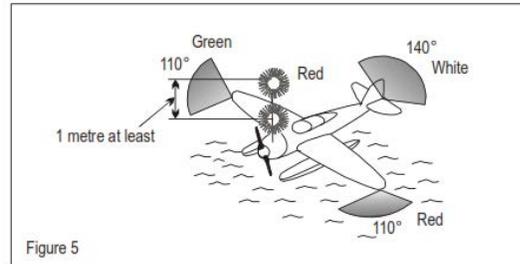
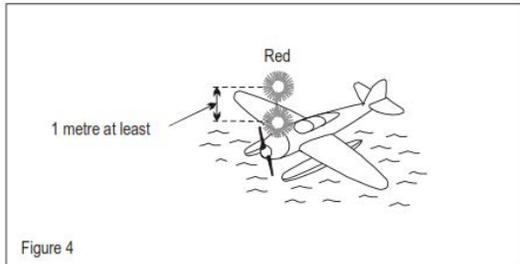
### 3.5 When not under command and not making way

As illustrated in Figure 4, two steady red lights placed where they can best be seen, one vertically over the other and not less

than 1 m apart, and of such a character as to be visible all around the horizon at a distance of at least 3.7 km (2 NM).

### 3.6 When making way but not under command

As illustrated in Figure 5, the lights described in 3.5 plus the lights described in 3.2 a), b) and c).

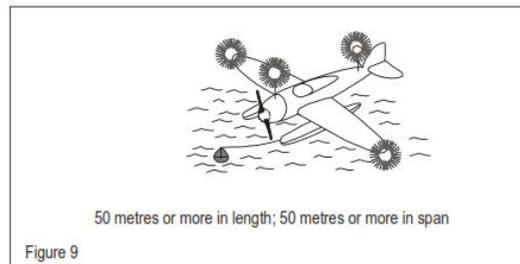
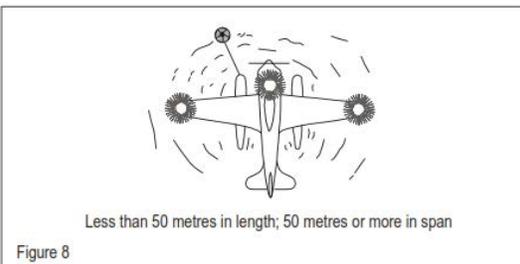
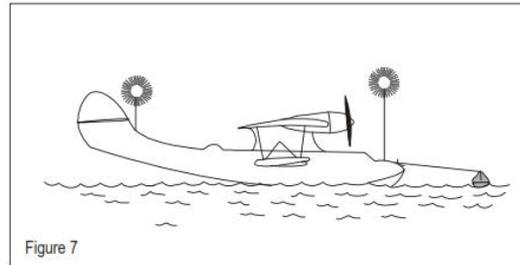
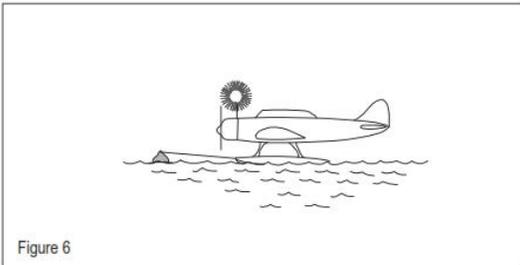


### 3.7 When at anchor

a) If less than 50 m in length, where it can best be seen, a steady white light (Figure 6), visible all around the horizon at a distance of at least 3.7 km (2 NM).

b) If 50 m or more in length, where they can best be seen, a steady white forward light and a steady white rear light (Figure 7) both visible all around the horizon at a distance of at least 5.6 km (3 NM).

c) If 50 m or more in span a steady white light on each side (Figures 8 and 9) to indicate the maximum span and visible, so far as practicable, all around the horizon at a distance of at least 1.9 km (1 NM).



### 3.8 When aground

The lights prescribed in 3.7 and in addition two steady red lights in vertical line, at least 1 m apart so placed as to be visible all around the horizon.

## SECOND SCHEDULE

### ADDITIONAL REQUIREMENTS FOR APPROVED OPERATIONS BY SINGLE-ENGINE TURBINE-POWERED AEROPLANES AT NIGHT AND/OR IN INSTRUMENT METEOROLOGICAL CONDITIONS (IMC)

Airworthiness and operational requirements provided in accordance with these regulation shall satisfy the following:

#### 1. TURBINE ENGINE RELIABILITY

1.1 Turbine engine reliability shall be shown to have a power loss rate of less than 1 per 100 000 engine hours.

1.2 The operator shall be responsible for engine trend monitoring.

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

- a) an ignition system that activates automatically, or is capable of being operated manually, for take-off and landing, and during flight, in visible moisture;
- 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) an emergency engine power control device that permits 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

Single-engine turbine-powered aeroplanes approved to operate at night and/or in IMC shall be equipped with the following systems and equipment intended to ensure continued safe flight and to

assist in achieving a safe forced landing after an engine failure, under all allowable operating conditions:

- a) 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 at night and/or in IMC;
- b) a radio altimeter;
- c) an emergency electrical supply system of sufficient capacity and endurance, following loss of all generated power to as a minimum:

1) maintain the operation of all essential flight instruments, communication and navigation systems during a descent from the maximum certificated altitude in a glide configuration to the completion of a landing;

2) lower the flaps and landing gear, if applicable;

3) provide power to one pitot heater, which must serve an air speed indicator clearly visible to the pilot;

4) provide for operation of the landing light specified in 2(j);

5) provide for one engine restart, if applicable; and

6) provide for the operation of the radio altimeter;

d) two attitude indicators, powered from independent sources;

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

f) airborne weather radar;

g) a certified area navigation system capable of being programmed with the positions of aerodromes and safe forced landing areas, and providing instantly available track and distance information to those locations;

h) for passenger operations, passenger seats and mounts which meet dynamically-tested performance standards and which are fitted with a shoulder harness or a safety belt with a diagonal shoulder strap for each passenger seat;

i) in pressurized aeroplanes, sufficient supplemental oxygen for all occupants for descent following engine failure at the maximum glide performance from the maximum certificated altitude to an altitude at which supplemental oxygen is no longer required;

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

k) an engine fire warning system.

### 3. MINIMUM EQUIPMENT LIST

The Authority shall require the minimum equipment list of the operator approved in accordance with the provision, regulations to specify the operating equipment required for night and/or IMC operations, and for day/VMC operations.

### 4. FLIGHT MANUAL INFORMATION

The flight manual shall include limitations, procedures, approval status and other information relevant to operations by single-engine turbine-powered aeroplanes at night and/or in IMC.

### 5. EVENT REPORTING

5.1 The operator approved for operations by single-engine turbine-powered aeroplanes at night and/or in IMC shall report all significant failures, malfunctions or defects to the Authority who in turn will notify the State of Design.

5.2 The Authority shall review the safety data and monitor the reliability information so as to be able to take any actions necessary to ensure that the intended safety level is achieved.

5.3 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 over flown, 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.

6.2 The operator shall identify aerodromes or safe forced landing areas available for use in the event of engine failure, and the position of these shall be programmed into the area navigation system.

## 7. FLIGHT CREW EXPERIENCE, TRAINING AND CHECKING

7.1 The Authority shall prescribe the minimum flight crew experience required for night/IMC operations by single-engine turbine-powered aeroplanes.

7.2 The operator's flight crew training and checking shall be appropriate to night and/or IMC operations by single engine turbine-powered aeroplanes, covering normal, abnormal and emergency procedures and, in particular, engine failure, including descent to a forced landing in night and/or in IMC conditions.

## 8. ROUTE LIMITATIONS OVER WATER

The Authority shall apply route limitation criteria for single-engine turbine-powered aeroplanes operating at night and/or in IMC on over water operations if beyond gliding distance from an area suitable for a safe forced landing/ditching having regard to the characteristics of the aeroplane, seasonal weather influences, including likely sea state and temperature, and the availability of search and rescue services.

## 9. OPERATOR CERTIFICATION OR VALIDATION

The operator shall demonstrate the ability to conduct operations by single-engine turbine-powered aeroplanes at night and/or in IMC through a certification and approval process specified by the Authority.

### THIRD SCHEDULE

#### ALTIMETRY SYSTEM PERFORMANCE REQUIREMENTS FOR OPERATIONS IN RVSM AIRSPACE

1. In respect of groups of aeroplanes that are nominally of identical design and build with respect to all details that could influence the accuracy of height-keeping performance, the height-keeping performance capability shall be such that the total vertical error (TVE) for the group of aeroplanes shall have a mean no greater than 25 m (80 ft) in magnitude and shall have a standard deviation no greater than  $28 - 0.013z^2$  for  $0 \leq z \leq 25$  when  $z$  is the magnitude of the mean TVE in meters, or  $92 - 0.004z^2$  for  $0 \leq z \leq 80$  where  $z$  is in feet. In addition, the components of TVE shall have the following characteristics:

- a) the mean altimetry system error (ASE) of the group shall not exceed 25 m (80 ft) in magnitude;
- b) the sum of the absolute value of the mean ASE and of three standard deviations of ASE shall not exceed 75 m (245 ft); and
- c) the differences between cleared flight level and the indicated pressure altitude actually flown shall be symmetric about a mean of 0 m, with a standard deviation no greater than 13.3 m (43.7 ft), and in addition, the decrease in the frequency of differences with increasing difference magnitude shall be at least exponential.

2. In respect of aeroplanes for which the characteristics of the airframe and altimetry system fit are unique and so cannot be classified as belonging to a group of aeroplanes encompassed by paragraph 1, the height-keeping performance capability shall be such that the components of the TVE of the aeroplane have the following characteristics:

- a) the ASE of the aeroplane shall not exceed 60 m (200 ft) in magnitude under all flight conditions; and
- b) the differences between the cleared flight level and the indicated pressure altitude actually flown shall be symmetric about a mean of 0 m, with a standard deviation no greater than 13.3 m (43.7 ft), and in addition, the decrease in the frequency of differences with increasing difference magnitude shall be at least exponential.

### FOURTH SCHEDULE

#### FATIGUE RISK MANAGEMENT SYSTEM REQUIREMENTS

## 1. FRMS POLICY AND DOCUMENTATION

### 1.1 FRMS policy

1.1.1 The operator shall define its FRMS policy, with all elements of the FRMS clearly identified.

1.1.2 The policy shall require that the scope of FRMS operations be clearly defined in the operations manual.

1.1.3 The policy shall:

- a) reflect the shared responsibility of management, flight and cabin crews, and other involved personnel;
- b) clearly state the safety objectives of the FRMS;
- c) be signed by the accountable executive of the organization;
- d) be communicated, with visible endorsement, to all the relevant areas and levels of the organization;
- e) declare management commitment to effective safety reporting;
- f) declare management commitment to the provision of adequate resources for the FRMS;
- g) declare management commitment to continuous improvement of the FRMS;
- h) require that clear lines of accountability for management, flight and cabin crews, and all other involved personnel are identified; and
- i) require periodic reviews to ensure it remains relevant and appropriate.

### 1.2 FRMS documentation

The operator shall develop and keep current FRMS documentation that describes and records:

- a) FRMS policy and objectives;
- b) FRMS processes and procedures;
- c) accountabilities, responsibilities and authorities for these processes and procedures;
- d) mechanisms for ongoing involvement of management, flight and cabin crew members, and all other involved personnel;
- e) FRMS training programmes, training requirements and attendance records;
- f) scheduled and actual flight times, duty periods and rest periods with significant deviations and reasons for deviations noted; and
- g) FRMS outputs including findings from collected data, recommendations, and actions taken.

## 2. FATIGUE RISK MANAGEMENT PROCESSES

### 2.1 Identification of hazards

The operator shall develop and maintain three fundamental and documented processes for fatigue hazard identification:

#### 2.1.1 *Predictive*

The predictive process shall identify fatigue hazards by examining crew scheduling and taking into account factors known to affect sleep and fatigue and their effects on performance. Methods of examination may include but are not limited to:

- a) operator or industry operational experience and data collected on similar types of operations;
- b) evidence-based scheduling practices; and
- c) bio-mathematical models.

#### 2.1.2 *Proactive*

The proactive process shall identify fatigue hazards within current flight operations. Methods of examination may include but are not limited to:

- a) self-reporting of fatigue risks;
- b) crew fatigue surveys;
- c) relevant flight and cabin crew performance data;
- d) available safety databases and scientific studies; and
- e) analysis of planned versus actual time worked.

#### 2.1.3 *Reactive*

The reactive process shall identify the contribution of fatigue hazards to reports and events associated with potential negative safety consequences in order to determine how the impact of fatigue could have been minimized. At a minimum, the process may be triggered by any of the following:

- a) fatigue reports;
- b) confidential reports;
- c) audit reports;
- d) incidents; and
- e) flight data analysis events.

### 2.2 Risk assessment

2.2.1 The operator shall develop and implement risk assessment procedures that determine the probability and potential severity of fatigue-related events and identify when the associated risks require mitigation.

2.2.2 The risk assessment procedures shall review identified hazards and link them to:

- a) operational processes;
- b) their probability;
- c) possible consequences; and
- d) the effectiveness of existing safety barriers and controls.

### 2.3 Risk mitigation

The operator shall develop and implement risk mitigation procedures that:

- a) select the appropriate mitigation strategies;
- b) implement the mitigation strategies; and
- c) monitor the strategies' implementation and effectiveness.

## 3. FRMS SAFETY ASSURANCE PROCESSES

The operator shall develop and maintain FRMS safety assurance processes to:

a) provide for continuous FRMS performance monitoring, analysis of trends, and measurement to validate the effectiveness of the fatigue safety risk controls. The sources of data may include, but are not limited to:

- 1) hazard reporting and investigations;
- 2) audits and surveys; and
- 3) reviews and fatigue studies;

b) provide a formal process for the management of change which shall include but is not limited to:

- 1) identification of changes in the operational environment that may affect FRMS;
- 2) identification of changes within the organization that may affect FRMS; and
- 3) consideration of available tools which could be used to maintain or improve FRMS performance prior to implementing changes; and

c) provide for the continuous improvement of the FRMS. This shall include but is not limited to:

- 1) the elimination and/or modification of risk controls that have had unintended consequences or that are no longer needed due to changes in the operational or organizational environment;
- 2) routine evaluations of facilities, equipment, documentation and procedures; and

3) the determination of the need to introduce new processes and procedures to mitigate emerging fatigue-related risks.

#### 4. FRMS PROMOTION PROCESSES

FRMS promotion processes support the ongoing development of the FRMS, the continuous improvement of its overall performance, and attainment of optimum safety levels. The following shall be established and implemented by the operator as part of its FRMS:

a) training programmes to ensure competency commensurate with the roles and responsibilities of management, flight and cabin crew, and all other involved personnel under the planned FRMS; and

b) an effective FRMS communication plan that:

1) explains FRMS policies, procedures and responsibilities to all relevant stakeholders; and

2) describes communication channels used to gather and disseminate FRMS-related information.

## FIFTH SCHEDULE

### LOCATION OF AN AEROPLANE IN DISTRESS

#### 1. PURPOSE AND SCOPE

Location of an aeroplane in distress aims at establishing, to a reasonable extent, the location of an accident site within a 6 NM radius.

#### 2. OPERATION

2.1 An aeroplane in distress shall automatically activate the transmission of information from which its position can be determined by the operator and the position information shall contain a time stamp. It shall also be possible for this transmission to be activated manually. The system used for the autonomous transmission of position information shall be capable of transmitting that information in the event of aircraft electrical power loss, at least for the expected duration of the entire flight.

2.2 An aircraft is in a distress condition when it is in a state that, if the aircraft behavior event is left uncorrected, can result in an accident. Autonomous transmission of position information shall be active when an aircraft is in a distress condition. This will provide a high probability of locating an accident site to within a 6 NM radius. The operator shall be alerted when an aircraft is in a distress condition with an acceptable low rate of false alerts. In case of a triggered transmission system, initial transmission of position information shall commence immediately or no later than five seconds after the detection of the activation event.

2.3 When an aircraft operator or an air traffic service unit (ATSU) has reason to believe that an aircraft is in distress, coordination shall be established between the ATSU and the aircraft operator.

2.4 The State of the Operator shall identify the organizations that will require the position information of an aircraft in an emergency phase. These shall include, as a minimum:

- a) air traffic service unit(s) (ATSU); and
- b) SAR rescue coordination center (s) (RCC) and sub-centers.

2.5 When autonomous transmission of position information has been activated, it shall only be able to be deactivated using the same mechanism that activated it.

2.6 The accuracy of position information shall, as a minimum, meet the position accuracy requirements established for ELTs.