

THE CIVIL AVIATION ACT
(CAP. 80)

REGULATIONS

(Made under Section 4)

THE CIVIL AVIATION (OPERATION OF AIRCRAFT) (AMENDMENT)
REGULATIONS, 2013

Citation
GN. No.
26 of 2013

1. These Regulations may be cited as the Civil Aviation (Operation of Aircraft) (Amendment) Regulations, 2013 and shall be read as one with the Civil Aviation (Operation of Aircraft) Regulations, 2012, hereinafter referred to as the “principal Regulations”.

Amendment of
regulation 2

2. The principal Regulations are amended in regulation 2 by inserting the following new definitions in their proper alphabetical sequence-

“Accelerate-Stop Distance Available (ASDA)” means the length of the take-off run available plus the length of stopway, if provided;

“aerodrome” means a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft;

“aerodrome operating minima” means the limits of usability of an aerodrome for-

- (a) take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions;
- (b) landing in precision approach and landing operations, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the category of the operation;
- (c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H); and

- (d) landing in non-precision approach and landing operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions;

“Aircraft operating manual” means a manual, acceptable to the State of the Operator, containing normal, abnormal and emergency procedures, checklists, limitations, performance information, details of the aircraft systems and other material relevant to the operation of the aircraft;

“Air Operator Certificate (AOC)” means a certificate authorizing an operator to carry out specified commercial air transport operations;

“airworthy” means the status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation;

“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;

“approach and landing operations using instrument approach procedures” means instrument approach and landing operations classified as follows-

- (a) non-precision approach and landing operations. An instrument approach and landing which utilizes lateral guidance but does not utilize vertical guidance;
- (b) approach and landing operations with vertical guidance. An instrument approach and landing which utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations; and
- (c) precision approach and landing operations. An instrument approach and landing using precision lateral and vertical guidance with minima as determined by the category of operation;

“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;

“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;
- “cruising level” means a level maintained during a significant portion of a flight;
- “dangerous goods” means articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions;
- “Decision Altitude (DA) or Decision Height (DH), Duty” means a specified altitude or height in the precision approach or approach with vertical guidance at which a missed approach must be initiated if the required visual reference to continue the approach has not been established;
- “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;
- “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 and an ELT may be any of the following-
- (a) Automatic fixed ELT (ELT (AF)) which is an automatically activated ELT which is permanently attached to an aircraft.
 - (b) Automatic portable ELT (ELT (AP)) which is an automatically activated (b) ELT which is rigidly attached to an aircraft but readily removable from the aircraft.
 - (c) Automatic deployable ELT (ELT (AD)) which is an ELT which is rigidly attached to an aircraft and which is automatically deployed and activated by impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided.
 - (d) Survival ELT (ELT(S)) means an ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors;
- “engine” means a unit used or intended to be used for aircraft propulsion and 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;
- “fatigue” means a physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness and/or physical activity that can impair a crew member’s alertness and ability to safely operate an aircraft or perform safety related duties;
- “flight data analysis” means a process of analysing recorded flight data in order to improve the safety of flight operations;
- “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 recorder” means any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation;
- “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) 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;
 - (b) 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; and
 - (c) 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;
- “ground handling services” means services necessary for an aircraft’s arrival at, and departure from, an airport, other than air traffic services;
- “Head-Up Display (HUD)” means a display system that presents flight information into the pilot’s forward external field of view;
- “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 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;
- “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 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;
- “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 non-precision approach or circling approach below which descent must not be made without the required visual

reference;

“Navigation specification” means a set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace which are of two kinds-

- (a) Required Navigation Performance (RNP) specification which means a 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;
- (b) Area Navigation (RNAV) specification which 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;

“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;

“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 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;

“pressure-altitude” means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere;

“Required Communication Performance (RCP)” means a statement of the performance requirements for operational communication in support of specific ATM functions;

“Required Communication Performance type (RCP type)” means a label (e.g. RCP 240) that represents the values assigned to RCP parameters for communication transaction time, continuity, availability and integrity;

“Runway Visual Range (RVR)” means the range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line;

“safe forced landing” means unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface;

- “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 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;
- “state safety programme” means an integrated set of regulations and activities aimed at improving safety;
- “Target Level of Safety (TLS)” means a generic term representing the level of risk which is considered acceptable in particular circumstances;
- “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); and
- “Visual Meteorological Conditions (VMC)” means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.”

Amendment of principal Regulations

3. The principal Regulations are amended by deleting regulation 4 and substituting for it with the following:

“Aeroplanes and Helicopter airworthiness and safety precautions.

- 4.-(1)** An operator shall develop procedures to ensure that a flight is not commenced unless-
- (a) the aeroplane is airworthy, duly registered and that appropriate certificates with respect thereto are aboard the aeroplane;
 - (b) the instruments and equipment installed in the aeroplane are appropriate, taking into account the expected flight conditions;
 - (c) any necessary maintenance has been performed in accordance with these regulations;
 - (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;
 - (e) any load carried is properly distributed and safely secured; and
 - (f) the aeroplane operating limitations, contained in the flight manual, or its equivalent, will not be exceeded.
- (2) A flight shall not be commenced until the pilot-in-command is satisfied that-
- (a) the helicopter is airworthy, duly registered and that appropriate certificates with respect thereto are aboard the helicopter;

- (b) the instruments and equipment installed in the helicopter are appropriate, taking into account the expected flight conditions;
- (c) any necessary maintenance has been performed in accordance with these regulations;
- (d) the mass of the helicopter and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected;
- (e) any load carried is properly distributed and safely secured; and
- (f) the helicopter operating limitations contained in the flight manual, or its equivalent, will not be exceeded.”

Amendment of regulation 8

4. The principal Regulations are amended in regulation 8(1) by inserting the following new paragraph immediately after paragraph (c)-

“(d) the operations manual describing the content and use of the operational flight plan.”

Addition of new regulation

5. The principal Regulations are amended by adding immediately after regulation 8, new regulation as follows-

“Aeroplane operation standards

8A.-(1) 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.

(2) The State of Registry shall take such precautions as are reasonably possible to ensure that the general level of safety contemplated by this regulation is maintained under all expected operating conditions, including those not covered specifically by the provisions of this regulation.

(3) A flight shall not be commenced unless the performance information provided in the flight manual indicates that the Standards provided under this regulation have been complied with for the flight to be undertaken.

(4) For the purpose of applying the Standards under this regulation, account shall be taken on all factors that significantly affect the performance of the aeroplane in-

- (a) mass, operating procedures;
- (b) the pressure altitude appropriate to the elevation of the aerodrome, temperature, wind; and
- (c) runway gradient and condition of runway such as presence of slush, water or ice,

for landplanes, water surface condition
for seaplanes,

such factors shall be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the aeroplane is being operated.

(5) The mass of the aeroplane at the start of take-off shall-

- (a) not exceed the mass provided under sub regulation (6), nor the mass provided under sub regulation (8) and (9), allowing for expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is envisaged in this regulation.
- (b) In no case shall the mass at the start of take off 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.
- (c) In no case shall 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.
- (d) In no case shall the mass at the start of take-off, or at the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodrome, exceed the relevant maximum masses at which compliance has been demonstrated with the applicable noise certification Standards, 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.

(6) The aeroplane shall be able, in the event of a critical engine failing at any point in the take-off, either to discontinue the take-off and stop within either the accelerate-stop distance available or the runway available, or to continue the take-off and clear all obstacles along the flight path by an adequate margin until the aeroplane is in a position to comply with the provisions of sub regulation (8).

(7) 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.

(8) The aeroplane shall be able, in the event of the critical engine becoming inoperative at any point along the route or planned diversions therefrom, to continue the flight to an aerodrome at which the Standard under sub regulation (9) is met, without flying below the minimum obstacle clearance altitude at any point.

(9) The aeroplane 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.

(10) 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.”

Amendment of regulation 18

5. The principal Regulations are amended in regulation 18 by adding the following sub-regulation immediately after sub-regulation (3)-

“(4) The operator of a helicopter over 3,175 kg maximum mass shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide the information as prescribed in Civil Aviation (Airworthiness) Regulations.”

Addition of new regulation

6. The principal Regulations are amended by adding the following new regulation immediately after regulation 11-

“Journey log book

11A. The pilot-in-command shall be responsible for the journey log book or the general declaration containing the information listed in these Regulations.”

Amendment of regulation 22

7. The principal Regulations are amended in regulation 22(1) by deleting expression “25” and substituting therefore with expression “23”.

Amendment of regulation 24

- 8.** The principal Regulations are amended in regulation 24 by-
- “(a) deleting sub-regulation (1) and substituting for it with the following new sub regulation:
 - “(1) The Authority shall establish a State safety programme in order to achieve an acceptable level of safety in civil aviation.”
 - (b) inserting the following new sub-regulation:
 - “(2) An operator shall establish and maintain a safety management system that is appropriate to the size and complexity of the operation.”
 - (c) by renumbering sub-regulation (2), (3), (4) and (5) as (3), (4), (5) and (6) respectively.”

Amendment of regulation 25

- 9.** The principal Regulations are amended in regulation 29 by adding the following new sub-regulations immediately after sub-regulation 2:
- “(3) The records in sub regulation 3 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 these Regulations for a minimum period of one year after the signing of the maintenance release.
 - (4) In the event of a temporary change of operator, the records shall be made available to the new operator and in the event of any permanent change of operator; the records shall be transferred to the new operator.”

Amendment of regulation 29

- 10.** The principal Regulations are amended in regulation 29 by adding the following new sub-regulation immediately after sub-regulation (2)-
- “(3) 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.”

Amendment of regulation 30

- 11.** The principal Regulations are amended in regulation 30(1)(b) by adding the following new item-
- “(vii) the current status of compliance with all mandatory continuing airworthiness information.”

Addition of new regulation

- 12.** The principal Regulations are amended by inserting the following regulations immediately after regulation 32—

Aeroplane operating procedures for noise abatement

32A.-(1) Aeroplane operating procedures for noise abatement shall comply with the procedures specified by the operator and approved by the Authority.

(2) Noise abatement procedures specified by an operator for any one aeroplane type shall be the

same for all aerodromes.”

Amendment of
regulation 34

13. The principal Regulations are amended by deleting regulation 34 and replacing therefore with the following new regulation-

“**34.**-(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 the operating minima established in accordance with regulation 35.

(2) An instrument approach shall not be continued beyond the outer marker fix in case of precision approach, or below 300 m (1 000 ft) above the aerodrome in case of non-precision approach, unless the reported visibility or controlling RVR is above the specified minimum.

(3) Where, after passing the outer marker fix in case of precision approach, or after descending below 300 m (1 000 ft) above the aerodrome in case of non-precision approach, 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.”

Amendment of
regulation 35

14. The principal Regulations are amended by deleting regulation 35 and replacing for it with the following new regulation:

35.-(1) The State of the Operator 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 and such minima shall not be lower than any that may be established for such aerodromes by the State in which the aerodrome is located, except when specifically approved by that State.

(2) The State of the Operator shall require that in establishing the aerodrome operating minima which will apply to any particular operation, full account shall be taken of-

- (a) the type, performance and handling characteristics of the aeroplane;
- (b) the composition of the flight crew, their competence and experience;
- (c) the dimensions and characteristics of the runways which may be selected for use;

- (d) the adequacy and performance of the available visual and non-visual ground aids;
- (e) the equipment available on the aeroplane for the purpose of navigation and/or control of the flight path during the approach to landing and the missed approach;
- (f) (f) the obstacles in the approach and missed approach areas and the obstacle clearance altitude/height for the instrument approach procedures;
- (g) the means used to determine and report meteorological conditions; and
- (h) the obstacles in the climb-out areas and necessary clearance margins; and
- (i) a stabilization system, unless it has been demonstrated to the satisfaction of the certificating authority that the helicopter possesses, by nature of its design, adequate stability without such a system.

(3) Category II and Category III instrument approach and landing operations shall not be authorized unless RVR information is provided.

(4) For instrument approach and landing operations, aerodrome operating minima below 800 m visibility should not be authorized unless RVR information is provided.”

Amendment of regulation 39

15. The principal Regulations are amended in regulation 39 by adding the following new sub-regulation immediately after sub-regulation (6)-

“(7) The pilot-in-command shall not operate to or from a heliport using operating minima lower than those which may be established for that heliport by the State in which it is located, except with the specific approval of that State.”

Amendment of regulation 40

16. The principal Regulations are amended in regulation 40 by-

“(a) inserting the words “or helicopter or different types of helicopters” immediately after the words “different types of aeroplanes” appearing in sub-regulation (3);

(b) adding the following new sub-regulation immediately after sub-regulation (3)-

“(4) When a pilot-in-command or a co-pilot is flying several variants of the same type of helicopter or different types of helicopter with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide under which conditions the requirements of these regulations for each variant or

each type of helicopter shall be combined.”

Addition of new regulation

17. The principal Regulations are amended by adding the following new regulation immediately after regulation 40-

Performance information

40A.-(1) A flight shall not be commenced unless the performance information provided in the flight manual indicates that the provisions of these regulations are complied with for the flight to be undertaken.

(2) In applying the Standards of this chapter, account shall be taken of all factors that significantly affect the performance of the helicopter such as mass, operating procedures, the pressure-altitude appropriate to the elevation of the operating site, temperature, wind and condition of the surface, which shall be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the code of performance in accordance with which the helicopter is being operated.

Amendment of regulation 50

18. The principal Regulations are amended in regulation 50(1)(a) by inserting the word “security” immediately after the word “operations”.

Amendment of regulation 52

19. The principal Regulations are amended in regulation 52 by-

(a) deleting sub-regulation (2) and substituting for it with the following new sub-regulation:

“(2) If 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 in accordance with regulation 239(1)(d) shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.”

(b) adding the following new sub-regulation immediately after sub-regulation (2)-

“(3) The pilot-in-command is responsible for operational control and an operator shall describe the operational control system in the operations manual and identify the roles and responsibilities of those involved with the system.”

Amendment of regulation 61

20. The principal Regulations are amended in regulation 61 by adding the following new sub-regulation:

“(2) Checklists shall be used by flight crews prior to, during and after all phases of operations, and in emergencies, 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, are followed and the design and utilization of checklists shall observe Human Factors principles.”

Amendment of regulation 73

21. The principal Regulations are amended in regulation 73(1) by deleting the words “crew member” and replacing for it with the words “an operator”.

Addition of new regulation

22. The principal Regulations are amended by adding the following new regulation immediately after regulation 76:

“Duties of pilot-in-command

76A.-(1) The pilot-in-command shall ensure that the checklists specified are complied with in detail.

(2) Checklists shall be used by flight crews prior to, during and after all phases of operations, and in emergencies, 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 and the design and utilization of checklists shall observe Human Factors principles.”

Amendment of regulation 78

23. The principal Regulations are amended in regulation 78 by adding the following new sub-regulations immediately after sub-regulation (5)-

“(6) An operator shall ensure that Cabin crew are safeguarded so as to ensure reasonable probability of their retaining consciousness during any emergency descent which may be necessary in the event of loss of pressurization and, in addition, they should have such means of protection to enable them to administer first aid to passengers during stabilized flight following the emergency.

(7) Subject to sub-regulation (6), passengers shall be safeguarded by such devices or operational procedures to ensure reasonable probability of their surviving the effects of hypoxia in the event of loss of pressurization.”

Amendment to regulation 82.

24. The principle Regulations are amended in regulation 82 by deleting the words “take off” and replacing for it with the words “the flight is commenced”;

Addition of new regulation

25. The principal Regulations are amended by inserting the following new regulation immediately after regulation 87-

“Climb performance procedures

87A.-(1) The operator should 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.

(2) The information under sub-regulation (1) shall be included in the operations manual.”

Amendment of regulation 89

26. The principal Regulations are amended in regulation 89 by adding the following new sub-regulation immediately after sub-regulation (3)-

“(4) When weather conditions likely to affect the safety of other aircraft are encountered, they should be reported as soon as possible.”

Amendment of regulation 91

27. The principal Regulations are amended by deleting regulation 91 and replacing for it with the following new regulation-

“**91.**-(1) An operator shall ensure that a flight will not be commenced unless it has been ascertained by every reasonable means available that the ground and/or water facilities 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.

(2) In this regulation “Reasonable means” in these regulations is intended to denote the use, at the point of departure, of information available to the operator either through official information published by the aeronautical information services or readily obtainable from other sources.

(3) An 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.

(4) 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.

(5) An operator shall, as part of its safety management system, assess the level of rescue and fire fighting 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.

(6) Information related to the level of RFFS protection that is deemed acceptable by the operator shall be contained in the operations manual.

Amendment of
regulation 94

28. The principal Regulations are amended in regulation 94 by adding the following new sub-regulation immediately after sub-regulation (3)-

“(4) A flight to be conducted in accordance with IFR shall not be commenced unless the available information indicates that conditions, at the heliport of intended landing and at least one alternate heliport will, at the estimated time of arrival, be at or above the heliport operating minima.”

Amendment of
regulation 101

29. The principal Regulations are amended in regulation 101 by adding the following new sub-regulations immediately after sub-regulation (3)-

“(4) The fuel and oil carried in order to comply with provisions of this regulation shall, in the case of VFR operations, be at least the amount sufficient to allow the helicopter-

- (a) to fly to the heliport to which the flight is planned;
- (b) to fly thereafter for a period of 20 minutes at best-range speed; and
- (c) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator.

(5) The fuel and oil carried in order to comply with this regulation shall, in the case of IFR operations, be at least the amount sufficient to allow the helicopter—

- (a) when an alternate is not required, in terms of these regulations, to fly to the heliport to which the flight is planned, and thereafter-
 - (i) to fly 30 minutes at holding speed at 450m (1500 ft) above the destination heliport under standard temperature conditions and approach and land; and
 - (ii) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator.
- (b) When an alternate is required, to fly to and execute an approach, and a missed approach, at the heliport to which the flight is planned, and thereafter-
 - (i) to fly to the alternate specified in the flight plan;

- (ii) to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate under standard temperature conditions; and approach and land; and
- (iii) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator.

(6) When no suitable alternate is available, in terms of these regulations, sufficient fuel shall be carried to enable the helicopter to fly to the destination to which the flight is planned and thereafter for a period that will, based on geographic and environmental considerations, enable a safe landing to be made.”

Amendment of regulation 102

30. The principal Regulations are amended in regulation 102 by-

- (a) deleting the word “departure” and replacing for it with the words “commencement of the flight”;
- (b) adding the following new sub-regulations immediately after sub-regulation (5):

“(6) An operator shall specify flight planning procedures to provide 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 and these procedures shall be included in the operations manual.

(7) A flight, or series of flights, shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is satisfied that-

- (a) the helicopter is airworthy;
- (b) the instruments and equipment for the particular type of operation to be undertaken, are installed and are sufficient for the flight;
- (c) a maintenance release has been issued in respect of the helicopter;
- (d) the mass of the helicopter and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected;
- (e) any load carried is properly distributed and safely secured;

- (f) a check has been completed indicating that the operating limitations can be complied with for the flight to be undertaken; and
 - (g) the regulation relating to operational flight planning have been complied with.
- (8) Completed flight preparation forms shall be kept by an operator for a period of three months.”

Addition of new regulation

31. The principal Regulations are amended by adding the following new regulation immediately after regulation 102-

“Piston-engined aeroplanes

102A. The fuel and oil carried in order to comply with regulation 101 shall, in the case of piston-engined aeroplanes, be at least the amount sufficient to allow the aeroplane-

- (a) When a destination alternate aerodrome is required, either—
 - (i) to fly to the aerodrome to which the flight is planned thence to the most critical (in terms of fuel consumption) alternate aerodrome specified in the operational and ATS flight plans and thereafter for a period of 45 minutes; or
 - (ii) to fly to the alternate aerodrome via any predetermined point and thereafter for 45 minutes, provided that this shall not be less than the amount required to fly to the aerodrome to which the flight is planned and thereafter for-
 - (a) 45 minutes plus 15 per cent of the flight time planned to be spent at the cruising level(s), or
 - (b) two hours, whichever is less.
- (b) When a destination alternate aerodrome is not required-
 - (i) in terms of these regulations to fly to the aerodrome to which the flight is planned and thereafter for a period of 45 minutes; or
 - (ii) in terms of these regulations to fly to the aerodrome to which the flight is planned and thereafter for-
 - (a) 45 minutes plus 15 per cent of the flight time planned to be spent at the cruising level(s), or
 - (b) two hours, whichever is less.

Addition of new regulation

32. The Principal regulations are amended by adding the following new regulation immediately after regulation 103-

“Turbine-engined aeroplanes

103A. The fuel and oil carried in order to comply with regulation 101 shall, in the case of turbine-engined aeroplanes, be at least the amount sufficient to allow the aeroplane-

- (a) When a destination alternate aerodrome is required, either-
 - (i) to fly to and execute an approach, and a missed approach, at the aerodrome to which the flight is planned, and thereafter;
 - (ii) to fly to the alternate aerodrome specified in the operational and ATS flight plans; and then;
 - (iii) to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate aerodrome under standard temperature conditions, and approach and land; and
 - (iv) to have an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator; or
- (b) to fly to the alternate aerodrome via any predetermined point and thereafter for 30 minutes at 450 m (1 500 ft) above the alternate aerodrome, due provision having been made for an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator; provided that fuel shall not be less than the amount of fuel required to fly to the aerodrome to which the flight is planned and thereafter for two hours at normal cruise consumption.”

Amendment of regulation 108

33. The principal Regulations are amended in regulation 108 by adding the following new sub-regulation immediately after sub-regulation (5)-

“(6) The operator shall issue operating instructions and provide information on helicopter climb performance with all engines operating to enable the pilot-in-command to determine the climb gradient that can be achieved during the take-off and initial climb phase for the existing take-off conditions and intended take-off technique and this information shall be based on the helicopter manufacturer’s or other data, acceptable to the State of the Operator, and shall be included in the operations manual.”

Amendment of regulation 110

34. The principal Regulation are amended in regulation 110 by-

- (a) designating it as sub regulation (1);
- (b) adding the following new sub regulations:

“(2) A person shall not conduct International general aviation operations unless the-

- (a) aeroplanes has a maximum certificated take-off mass exceeding 5 700 kg; or
- (b) aeroplanes equipped with one or more turbojet engines.

(3) An operation involving an aeroplane with a seating configuration of more than 9 passenger seats should be conducted in accordance with the provision of these regulations.”

Amendment of principal Regulations

35. The principal Regulations are amended by deleting regulation 114 and substituting therefore the following new regulation-

“**114.**-(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.

(2) If an owner/operator aircraft type grouping consists of a single aeroplane, monitoring of that aeroplane shall be accomplished within the specified period.”

Amendment of regulation 123

35. The principal Regulations are amended in regulation 123 by-

- (a) by adding the following new sub regulations-

“(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.”

- (b) by inserting the expression “(1)” immediately after expression “123”.

Amendment of regulation 124

36. The principal Regulations are amended in regulation 124 by-

- (a) adding the following new paragraph immediately after sub-regulation (1)(b) by-

“(c) For instrument approach and landing operations, 800m visibility should not be authorized unless RVR information is provided.”

- (b) adding the following new sub-regulation immediately after sub-regulation (4)-

“(5) 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.”

Amendment of regulation 125

37. The principal Regulations are amended in regulation 125 by-

- (a) inserting the following new sub-regulation immediately after sub-regulation (1)-

“(2) In the aircraft operating manual, an operator shall include operating procedures for conducting instrument approaches.”

- (b) by renumbering sub-regulation “(2)” to read as “(3)”.

Amendment of regulation 130

38. The principal Regulations are amended in regulation 130 by adding the following new sub-regulation-

“(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 assigned level when the pilot is made aware of another aircraft at or approaching an adjacent altitude or flight level.”

Amendment of regulation 131

39. The principal Regulations are amended in regulation 131 by adding the following new sub-regulation-

“(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

- (a) the accuracy and reliability with which the position of the aeroplane can be determined;
- (b) the inaccuracies in the indications of the altimeters used;
- (c) the characteristics of the terrain (e.g. sudden changes in the elevation);
- (d) the probability of encountering unfavourable meteorological conditions (e.g. severe turbulence and descending air currents);
- (e) possible inaccuracies in aeronautical charts; and
- (f) airspace restrictions.”

Amendment of regulation 133

40. The principal Regulations are amended in regulation 133 by adding the following new sub-regulations immediately after sub-regulation (2):

“(3) 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 the provision of this regulation and regulation 134 are complied with for the flight to be undertaken.”

(4) In applying the provisions of this regulation, account shall be taken of all factors that significantly affect the performance of the aeroplane, including but not limited to-

- (a) the mass of the aeroplane;
- (b) the operating procedures;
- (c) the pressure-altitude appropriate to the elevation of the aerodrome;
- (d) the ambient temperature;
- (e) the wind;
- (f) the runway slope; and
- (g) surface conditions of the runway such as presence of snow, slush, water, and/or ice for landplanes, water surface condition for seaplanes.

(5) The factors under sub-regulation (4) 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.”

Addition of new regulation

41. The principal Regulations are amended by adding the following new regulation immediately after regulation 166:

“Least-risk
bomb location
and stowage
of weapons

166A.-(1) Specialized means of attenuating and directing the blast shall be provided for use at the least-risk bomb location.

(2) Where an operator accepts the carriage of weapons removed from passengers, the aeroplane should have provision for stowing such weapons in a place so that they are inaccessible to any person during flight time.”

Amendment of regulation 190.

42. The principal Regulations are amended in regulation 190 by inserting the following new sub-regulation immediately after sub-regulation (6)-

“(7) An operator shall ensure that a training programme is completed by all persons before being assigned as a cabin crew member.”

Amendment of regulation 186

43. The principal Regulations are amended in regulation 186 by deleting the opening phrase and substituting for it with the following new phrase-

“An operator shall develop and submit a security training programme to the Authority which ensures crew members act in the most appropriate manner to minimize the consequences of acts of unlawful interference for approval and the programme shall, as a minimum, include the following elements.”

Amendment of regulation 191

44. The principal Regulations are amended in regulation 191 by inserting the following new sub-regulation immediately after sub-regulation (4)-

“(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.

(6) Subject to sub-regulation (5), the training programme should include Human Factors training.”

Amendment of regulation 210

45. The principal Regulations are amended in regulation 210 by inserting the following new sub-regulation-

“(2) Where helicopters are operated to or from heliports in a congested hostile environment, the competent authority of the State in which the heliport is situated shall specify the requirements to enable these operations to be conducted in a manner that gives appropriate consideration for the risk associated with an engine failure.”

Amendment of regulation 226

46. The principal Regulations are amended in regulation 226(3) by adding the following new definitions in their proper alphabetical sequence-

“ “approval” means an authorization granted by an appropriate national authority for-

- (a) the transport of dangerous goods forbidden on passenger and/or cargo aircraft where the Technical Instructions state that such goods may be carried with an approval; or

- (b) other purposes as provided for in the Technical Instructions;
- “dangerous goods accident” means an occurrence associated with and related to the transport of dangerous goods by air which results in fatal or serious injury to a person or major property or environmental damage;
- “dangerous goods incident” means an occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property or environmental damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardizes the aircraft or its occupants is also deemed to constitute a dangerous goods incident;
- “duty and flight 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.
- “exemption” means an authorization issued, other than an approval, granted by an appropriate national authority providing relief from the provisions of the Technical Instructions;
- “fatigue” means a physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase, or workload (mental and/or physical activity) that can impair a crew member’s alertness and ability to safely operate an aircraft or perform safety-related duties;
- “flight duty period” means a period which commences when a 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 at the end of the last flight on which he/she is a crew member;
- “home base” means the location nominated by the operator to the crew member from where the crew member normally starts and ends a duty period or a series of duty periods;
- “positioning” means the transferring of a non-operating crew member from place to place as a passenger at the behest of the operator;

“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;

“reporting time” means the time at which flight and cabin crew members are required by an operator to report for duty;

“roster” means a list provided by an operator of the times when a crew member is required to undertake duties;

“state of Origin” means the State in the territory of which the cargo consignment was first loaded on an aircraft;

“standby” means a defined period of time during which a flight or cabin crew member is required by the operator to be available to receive an assignment for a specific duty without an intervening rest period;

“suitable accommodation” means a furnished bedroom which provides for the opportunity of adequate rest

“technical instructions” means the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council; and

“Unforeseen operational circumstance” means an unplanned event, such as unforecast weather, equipment malfunction, or air traffic delay that is beyond the control of the operator.

Amendment of regulation 227

47. The principal Regulations are amended in regulation 227 by adding the following new sub-regulation-

“(11) An operator shall establish and implement a fatigue management programme that ensures that all operator personnel involved in the operation and maintenance of aircraft do not carry out their duties when fatigued and the programme shall address flight and duty times and be included in the operations manual.”

Amendment of regulation 237

48. The principal Regulations are amended in regulation 237 by deleting sub regulation (6) and substituting therefor the following new sub-regulation:

“(6) A flight operations officer/flight dispatcher-

- (a) 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.
- (b) shall not be assigned to duty after 12 consecutive months of absence from such duty, unless the provisions of regulation 183 are met.”

Addition of new regulation

49. The principal Regulations are amended by adding the following new regulation immediately after regulation 238-

“Operator notification

238A.-(1) If an operator has an operating base in a State other than the State of Registry, the operator shall notify the State in which the operating base is located.

(2) Upon notification under sub-regulation (1), safety and security oversight shall be coordinated between the State in which the operating base is located and the State of Registry.”

Amendment of regulation 239

50. Regulation 239 of the principal Regulations is amended-

(a) deleting paragraph (d) and substituting for it with the following new paragraph of sub-regulation (1) by-

“(d) in the event of an emergency, a flight operations officer shall-

(i) initiate such procedures as outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and

(ii) 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.”

(b) by adding the following new sub-regulations immediately after sub-regulation (2)-

“(3) An 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.

(4) An operator shall issue operating instructions and provide information on aeroplane climb performance 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.

(5) An operator shall make available sufficient information on climb performance with all engines operating to enable determination of the climb gradient that can be achieved during the departure phase for the existing take-off conditions and intended take-off technique.

(6) An operation involving an aeroplane with a seating configuration of more than 9 passenger seats shall be conducted in accordance with these Regulations.

(7) A corporate aviation operation involving three or more aircraft that are operated by pilots employed for the purpose of flying the aircraft should be conducted in accordance with these Regulations.”

Amendment of regulation 245

51. The principal Regulations are amended in regulation 245 by adding the following new sub-regulation:

“(2) A flight, except one purely local character in visual meteorological conditions, to be conducted in accordance with VFR shall not be commenced unless available 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 render compliance with these rules possible.”

Amendment of regulation 251

51. The principal Regulations are amended in regulation 251 by adding the following new sub-regulation immediately after sub-regulation (3)-

“(4) The Authority of the Operator of 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 single-engine cruise speed to an adequate en-route alternate aerodrome exceeded the threshold time established for such operations in accordance with regulation 98, shall give consideration to permitting such an operation to continue on that route after that date.”

Dar es Salaam,
....., 2013

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