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NIGERIA CIVIL AVIATION REGULATIONS 2015

PART 8—OPERATIONS

INTRODUCTION

Part 8 of the Nigeria Civil Aviation Regulations presents regulatory requirements for the operation of aircraft in Nigeria, based upon the requirements of ICAO *Annexes 2* and *6*.

Part 8 prescribes the requirements for operations conducted by airmen certificated in Nigeria while operating aircraft registered in Nigeria, as well as operations of foreign registered aircraft by Nigerian AOC holders, and operations of aircraft within Nigeria by airmen or AOC holders of a foreign State. Part 8 applies to operations outside of Nigeria by all Nigerian pilots and operators unless compliance would result in a violation of the laws of the foreign State in which the operation is conducted.

This Part applies to all aircraft, except where superseded by the more stringent requirements put upon entities engaged in commercial air transport and upon AOC holders.

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NIGERIA CIVIL AVIATION REGULATIONS 2015

PART 8—OPERATIONS



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PART 8—OPERATIONS

8.1. GENERAL

8.1.1.1.—(a) Part 8 prescribes the requirements for :

Applicability.

(1) Operations conducted by a flight crewmember certified in Nigeria while operating aircraft registered in Nigeria.

(2) Operations of foreign aircraft registered in another State by Nigerian AOC holders.

(3) Operations of aircraft within Nigeria by flight crew or AOC holders of another State.

(b) For operations outside of Nigeria, all Nigerian pilots and operators shall comply with these requirements unless compliance would result in a violation of the laws of the State in which the operation is conducted.

Note 1 : Where a particular requirement is applicable only to a particular segment of aviation operations, it will be identified by a reference to those particular operations, such as "*commercial air transport*" or "*small non-turbojet or turbofan aeroplanes*."

Note 2 : Those specific subsections not applicable to operators of other States will include the phrase "*This requirement is not applicable to operators of other States*."

8.1.1.2.—(a) For the purpose of Part 8, the following definitions shall apply—

Definitions.

(a) *Acrobatic Flight*—Maneuvers intentionally performed by an aircraft involving an abrupt change in its attitude, an abnormal attitude, or an abnormal variation in speed.

(b) *ADS-C Agreement*—A reporting plan which establishes the conditions of ADC-C data reporting (*i.e.*, data required by the air traffic services unit and frequency of ADC-C reports which have to be agreed to prior to using ADC-C in the provision of air traffic services).

Note : The terms of the agreement will be exchanged between the ground system and the aircraft by means of a contract, or a series of contracts.

(c) *Advisory Airspace*—An airspace of defined dimensions, or designated route, within which air traffic advisory service is available.

(d) *Aeroplane. Complex Aeroplane (Land)*—An aeroplane that has all the following characteristics: a retractable landing gear, flaps, and a controllable pitch propeller.

Complex Aeroplane (sea)—An aeroplane that has all the following characteristics : flaps, and controllable pitch propeller.

(e) *Aerial Work*—An aircraft operation in which an aircraft is used for specialised services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement, etc.

(f) *Air Navigation Facility*—Any facility used in, available for use in, or designed for use in aid of air navigation, including aerodromes, landing areas, lights, any apparatus or equipment for disseminating weather information, for signaling, for radio directional finding, or for radio or other electrical communication, and any other structure or mechanism having a similar purpose for guiding or controlling flight in the air or the landing and take-off of aircraft.

(g) *Alternate Aerodrome*—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 arrival. Alternate aerodromes include the following :

Take-Off Alternate—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.

En-route Alternate—An alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en route.

Destination Alternate—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.

(h) *Automatic Dependent Surveillance-Broadcast (ADS-B)*—A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

(i) *Calendar Day*—The period of elapsed time, using Coordinated Universal Time or local time, which begins at midnight and ends 24 hours later in the next midnight.

(j) *Check Person*—A qualified person who is authorised by the Authority to conduct an evaluation of either an AOC holders flight crew (pilots, flight engineers, or flight navigators), cabin crew, or flight operations officer. Terms used in this Part include: Check pilot; check flight engineer ; check flight navigator; check cabin crewmember, and check flight operations officer.

(k) *Check Person (Aircraft)*—A qualified person who is authorised by the Authority to conduct a flight crew evaluation in an aircraft and in a flight simulator training device for a particular type of aircraft, for a particular AOC holder.

(l) *Check Person (Simulator)*—A qualified person who is authorised by the Authority to conduct a flight crew evaluation, but only in a flight simulation training device, for a particular type of aircraft, for a particular AOC holder.

(m) *Command and Control Link (C2)*—The data link between the remotely piloted aircraft and the remote pilot station for the purposes of managing the flight.

(n) *Controlled Flight*—Any flight which is subject to an ATC clearance.

(o) *Critical Engine*—The engine whose failure would most adversely affect the performance or handling qualities of an aircraft.

(p) *Critical Phases of Flight*—Those portions of operations involving taxiing, takeoff and landing, and all flight operations below 3050 m (10000 ft), except cruise flight.

(q) *Cruise Relief Pilot*—A flight crewmember who is assigned to perform pilot tasks during cruise flight to allow the PIC or co-pilot to obtain planned rest.

(r) *Cruising Level*—A level maintained during a significant portion of a flight.

(s) *Dangerous goods*—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 ICAO Technical Instructions (see definition below) or which are classified according to those Instructions.

Note : Dangerous goods are classified in *Annex 18*, Chapter 3.

(t) *Deadhead Transportation*—Time spent in transportation on aircraft (at the insistence of the AOC holder) to or from a crewmember's home station.

(u) *Decision Altitude (DA) or Decision Height (DH)*—A specified altitude or height in the precision approach at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

Note 1 : Decision altitude (DA) is referenced to mean sea level and decision height (DH) is referenced to the aerodrome elevation or to the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. DA is based on barometric pressure (or QNH-height above sea level) and is used for a CAT I ILS. DH is based on radio altimeter (or QFE-height above aerodrome) and is used for a CAT II and a CAT III ILS.

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Note 2 : The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path.

Note 3 : For convenience when both expressions are used they may be written in the form "*decision altitude/height*" and abbreviated "*DA/H*".

(v) *Defined Point After Takeoff*—The point, within the takeoff and initial climb phase, before which the Class 2 helicopter's ability to continue the flight safely with one engine inoperative, is not assured and a forced landing may be required.

(w) *Defined Point Before Landing*—The point, within the approach and landing phase, after which the Class 2 helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required.

(x) *Detect and Avoid*—The capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action.

(y) *Duty Period*—As it related to an air operator, a period which starts when flight or cabin crew personnel are required by an operator to report for or to commence a duty and ends when that person is free from all duties.

(z) *Effective length of the runway*—The distance for landing from the point at which the obstruction clearance plane associated with the approach end of the runway intersects the centreline of the runway to the far end.

(dd)(aa) *Extended diversion time operations (EDTO)*.—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 State of the Operator.

(ee)(bb) *Extended diversion time operations critical fuel*.—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.

(ff)(cc) *Extended diversion time operations significant system*.—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 extended diversion time operations diversion.

(gg)(dd) *Extended overwater operation*.—With respect to aircraft other than helicopters, an operation over water at a horizontal distance of more than 50 nm from the nearest shoreline ; and to helicopters, an operation over water at a horizontal distance of more than 50 nm from the nearest shoreline and more than 50 nm from an offshore heliport structure.

(hh)(ee) *Fatigue*.—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.

(ii)(ff) *Flight(s)*.—The period from takeoff to landing.

(jj)(gg) *Flight manual*.—A manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions information necessary to the flight crew members for the safe operation of the aircraft.

(kk)(hh) *Flight operations officer/flight dispatcher*.—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.

(ll)(ii) *Flight duty period*.—The total time from the moment a flight crewmember commences duty, immediately subsequent to a rest period and before making a flight or a series of flights, to the moment the flight crewmember is relieved of all duties having completed such flight or series of flights.

(mm)(jj) *Flight plan*.—Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft. The term "*flight plan*" is used to mean variously, full information on all items comprised in the flight plan description, covering the whole route of a flight, or limited information required when the purpose is to obtain a clearance for a minor portion of a flight such as to cross an airway, to take off from, or to land at a controlled aerodrome.

(nn)(kk) *Flight time*.—The period of time that the aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest after it is parked at the end of the flight.

(oo)(ll) *General Aviation Operation*.—An aircraft operation other than a commercial air transport operation or an aerial work operation.

(pp)(mm) *Instrument Meteorological Conditions(IMC)*.—Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

(qq)(nn) *Isolated Aerodrome*.—A destination aerodrome for which there is no destination alternate aerodrome suitable for a given aeroplane type.

(rr)(oo) *Helideck*.—A heliport located on a floating or fixed offshore structure.

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(*ss*)(*pp*) Heliport. An aerodrome or defined area on a structure intended to be used wholly or in part for the arrival, departure, and surface movement of helicopters.

(*tt*)(*qq*) Journey log. A form signed by the PIC of each flight that records the aircraft's registration, crewmember names and duty assignments, the type of flight, and the date, place, and time of arrival and departure.

(*uu*)(*rr*) Landing decision point. The point used in determining landing performance from which, an engine failure occurring at this point, the landing may be safely continued or a balked landing initiated.

(*vv*)(*ss*) Line check. A check given to a pilot by a check pilot to evaluate the pilot's operational competency during line operating flight time in an aircraft type he/she is qualified to fly, over a route and area in which the AOC is authorised to operate.

(*ww*)(*tt*) Line operating flight time. Flight time recorded by the PIC or Co-Pilot while in revenue service for an AOC holder.

(*xx*)(*uu*) Master Minimum Equipment List (MMEL). A list established for a particular aircraft type by the manufacturer 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. The MMEL provides the basis for development, review, and approval by the Authority of an individual operator's MEL.

(*yy*)(*vv*) Maximum diversion time. Maximum allowable range, expressed in time, from a point on a route to an en-route alternate aerodrome.

(*zz*)(*ww*) Minimum descent altitude (MDA) or minimum descent height (MDH). 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.

Note 1 : Minimum descent altitude (MDA) is referenced to mean sea level and minimum descent height (MDH) is referenced to the aerodrome elevation or to the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. A minimum descent height for a circling approach is referenced to the aerodrome elevation.

Note 2 : The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In the case of a circling approach the required visual reference is the runway environment.

Note 3 : For convenience when both expressions are used they may be written in the form "*minimum descent altitude/height*" and abbreviated "*MDA/H*".

(*aaa*)(*xx*) Obstacle clearance altitude (OCA) or Obstacle clearance height (OCH). 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.

Note 1. Obstacle clearance altitude is referenced to mean sea level and obstacle clearance height is referenced to the threshold elevation or in the case of non-precision approaches to the aerodrome elevation or the threshold elevation if that is more than 2 m (7ft) below the aerodrome elevation. An obstacle clearance height for a circling approach is referenced to the aerodrome elevation.

Note 2. For convenience when both expressions are used they may be written in the form "*obstacle clearance altitude/height*" and abbreviated "*OCA/H*."

(*bbb*)(*yy*) Obstruction clearance plane. A plane sloping upward from the runway at a slope of 1 : 20 to the horizontal, and tangent to or clearing all obstructions within a specified area surrounding the runway as shown in a profile view of that area. In the plane view, the centreline of the specified area coincides with the centreline of the runway, beginning at the point where the obstruction clearance plane intersects the centreline of the runway and proceeding to a point at least 450 m (1500 ft) from the beginning point. Thereafter, the centreline coincides with the takeoff path over the ground for the runway (in the case of takeoffs) or with the instrument approach counterpart (for landings), or where the applicable one of these paths has not been established, it proceeds consistent with turns of at least 1.2 km (4000 ft) radius until a point is reached beyond which the obstruction clearance plane clears all obstructions. This area extends laterally 60 m (200 ft) on each side of the centreline at the point where the obstruction clearance plane intersects the runway and continues at this width to the end of the runway; then it increases uniformly to 150 m (500 ft) on each side of the centreline at a point 450 m (1500 ft) from the intersection of the obstruction clearance plane with the runway; thereafter, it extends laterally 150 m (500 ft) on each side of the centreline.

(*ccc*)(*zz*) Operational flight plan. The operator's plan for the safe conduct of the flight based on considerations of aircraft performance, other operating limitations, and relevant expected conditions on the route to be followed and at the aerodromes or heliports concerned.

(*ddd*)(*aaa*) Operator. A person, organisation or enterprise engaged in or offering to engage in an aircraft operation.

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Note : In the context of remotely piloted aircraft, an aircraft operation includes the remotely piloted aircraft system.

(*eee*)(*bbb*) Passenger exit seats. Those seats having direct access to an exit, and those seats in a row of seats through which passengers would have to pass to gain access to an exit, from the first seat inboard of the exit to the first aisle inboard of the exit. A passenger seat having "*direct access*" means a seat from which a passenger can proceed directly to the exit without entering an aisle or passing around an obstruction.

(*fff*)(*ccc*) Remote pilot. A person charged by the operator with duties essential to the operation of a remotely piloted aircraft and who manipulates the flight controls, as appropriate, during flight time.

(*ggg*)(*ddd*) Remote pilot station. The component of the remotely piloted aircraft system containing the equipment used to pilot the remotely piloted aircraft.

(*hhh*)(*eee*) Remotely piloted aircraft (RPA). An unmanned aircraft which is piloted from a remote pilot station.

(*iii*)(*fff*) Remotely piloted aircraft system (RPAS). A remotely piloted aircraft, its associated remote pilot station(s), the required command and control links and any other components as specified in the type design.

(*jjj*)(*ggg*) Rest period. 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.

(*kkk*)(*hhh*) Point of no return. The last possible geographic point at which an aeroplane can proceed to the destination aerodrome as well as to an available en route alternate aerodrome for a given flight.

(*lll*)(*iii*) RPA observer. A trained and competent person designed by the operator who, by visual observation of the remotely piloted aircraft, assists the remote pilot in the safe conduct of the flight.

(*mmm*)(*jjj*) Takeoff decision point. The point used in determining take-off performance of a Class 1 helicopter from which, an engine failure occurring at this point, either a rejected takeoff may be made or a takeoff safely continued.

(*nnn*)(*kkk*) Threshold time. The range, expressed in time, established by the State of the Operator to an en-route alternate aerodrome, whereby any time beyond requires an extended diversion time operation approval from the State of the Operator.

(*ooo*)(*lll*) Visual line-of-sight (VLOS) operation. An operation in which the remote pilot or RPA observer maintains direct unaided visual contact with the remotely piloted aircraft.

8.1.1.3.—(a) The following abbreviations are used in Part 8 :

1. AAC All Aircraft
2. AFM Aeroplane Flight Manual.
3. AGL Above Ground Level.
4. AMSL Above Mean Sea Level.
5. AMT Aviation Maintenance Technician.
6. AOC Air Operator Certificate.
7. AOM Aircraft Operating Manual.
8. APU Auxiliary Power Unit.
9. ATC Air Traffic Control.
10. CAT Category.
11. C2 Command and Control Link.
12. CDL Configuration Deviation List.
13. CP Copilot.
14. CRM Crew Resource Management.
15. CRT Cathode Ray Tube
16. DH Decision Height.
17. ETA Estimated Time of Arrival.
18. EDTO Extended Diversion Time Operations.
19. FAS Final Approach Segment
20. FE Flight Engineer.
21. FL Flight Level.
22. FN Flight Navigator.
23. FOCC Flight Operations Clearance Certificate
24. FRMS Fatigue Risk Management System
25. FSTD Flight Simulation Training Device
26. GPS Global Positioning System.
27. IA Inspection Authorisation.
28. IFR Instrument Flight Rules.
29. IMC Instrument Meteorological Conditions.
30. INS Inertial Navigation System.
31. LDA Localizer-type Directional Aid.
32. LOC Localizer.
33. LORAN Long-range Navigation.

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34. LVTO Low Visibility Take Off.
35. MCC Maintenance Clearance Certificate
36. MDA Minimum Decent Altitude.
37. MEA Minimum En Route Altitude.
38. MEL Minimum Equipment List.
39. MMEL Master Minimum Equipment List.
40. MNPS Minimum Navigation Performance Specifications.
41. MOCA Minimum Obstruction Clearance Altitude.
42. MSL Mean Sea Level.
43. NM Nautical Miles.
44. NOTAM Notice to Airmen.
45. OCA Obstacle Clearance Altitude
46. OCH Obstacle Clearance Height
47. OCA/H Obstacle Clearance Altitude/Height
48. PIC Pilot in Command.
49. PBE Protective Breathing Equipment.
50. RFFS Rescue and Fire Fighting Service
51. RFM Rotorcraft Flight Manual.
52. RPA Remotely Piloted Aircraft.
53. RPAS Remotely Piloted Aircraft System.
54. RVR Runway Visual Range.
55. RVSM Reduced Vertical Separation Minimum.
56. SCCM Senior Cabin Crewmember.
57. SDF Simplified Directional Facility.
58. SM Statute Miles.
59. TACAN Tactical Air Navigation System.
60. VFR Visual Flight Rules.
61. VLOS Visual Line-Of-Sight
62. VMC Visual Meteorological Conditions.
63. VSM Vertical Separation Minimum.
64. V1 Takeoff decision speed.
65. V_{mo} Maximum operating speed.
66. V_{so} Stalling speed or the minimum steady flight speed in the landing configuration.

8.2. GENERAL OPERATIONS REQUIREMENTS

8.2.1. Aircraft Requirements.

8.2.1.1.—(a) No person may operate a Nigeria-registered aircraft unless it displays the proper markings prescribed in Part 4. Registration Markings.

8.2.1.2.—(a) No person may operate a civil aircraft unless it is in an airworthy condition. Civil Aircraft Airworthiness.

(b) Each PIC shall determine whether an aircraft is in a condition for safe flight.

(c) The PIC shall discontinue a flight as soon as practicable when an unairworthy mechanical, electrical, or structural condition occurs.

8.2.1.3. Special Airworthiness Certificate Operational Restrictions.

(a) No person may operate an aircraft with a special airworthiness certificate except as provided in the limitations issued with that certificate.

8.2.1.4.—(a) No person may operate an aircraft unless it is equipped with the required instruments and navigation equipment appropriate to type of flight operation conducted and the route being flown. Aircraft Instruments and Equipment.

Note : The instruments and equipment required for specific operations are listed in Part 7.

8.2.1.5.—(a) No person may takeoff in an aircraft with inoperative instruments or equipment installed, except as authorised by the Authority. Inoperative Instruments and Equipment.

(b) An AOC Holder shall not operate a multi-engine aircraft with inoperative instruments and equipment installed unless the following conditions are met :

(1) An approved MEL exists for that aircraft.

(2) The Authority has issued the AOC Holder operations specifications authorising operations in accordance with an approved MEL. The flightcrew shall have direct access at all times before flight to all of the information contained in the approved MEL through printed or other means approved by the Authority in the AOC Holder specific operating provisions. An approved MEL, as authorised by the specific operating provisions, constitutes an approved change to the type design without requiring recertification.

(c) The approved MEL must :

(1) Be prepared in accordance with the limitations specified in paragraph (c) of this section.

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(2) Provide for the operation of the aircraft with certain instruments and equipment in an inoperative condition.

(3) Records identifying the inoperative instruments and equipment and the information required by paragraph (b)(3)(ii) of this section must be available to the pilot.

(4) The aircraft is operated under all applicable conditions and limitations contained in the MEL and the operations specifications authorising use of the MEL.

(d) The following instruments and equipment may not be included in the MEL :

(1) Instruments and equipment that are either specifically or otherwise required by the airworthiness requirements under which the aircraft is type certificated and which are essential for safe operations under all operating conditions.

(2) Instruments and equipment required by an airworthiness directive to be in operable condition unless the airworthiness directive provides otherwise.

(3) Instruments and equipment required for specific operations under Part 7, Part 8, and/or Part 9 of these regulations.

(e) Notwithstanding paragraphs (c)(1) and (c)(3) of this section, an aircraft with inoperative instruments or equipment may be operated under a special flight permit under 5.4.1.11 of these regulations.

(f) In situations where no master minimum equipment list (MMEL) is available and no MEL is required for the specific aircraft operation under these regulations, flight operations with inoperative instruments and equipment installed may commence provided the following conditions are met.

(g) The inoperative instruments and equipment may not be—

(1) Part of the VFR-day instruments and equipment prescribed in Part 7 ;

(2) Required on the aircraft's equipment list or the operations equipment list for the kind of flight operation being conducted ;

(3) Required by Part 7 for the specific kind of flight operation being conducted ; or

(4) Required to be operational by an airworthiness directive.

Note : If deactivation of the inoperative instrument or equipment involves maintenance, it must be accomplished and recorded in accordance with Part 5.

(h) To be eligible for these provisions, the inoperative instruments and equipment shall be—

- (1) Determined by the PIC not to be a hazard to safe operation ;
- (2) Deactivated and placarded Inoperative ; and
- (3) Removed from the aircraft, the flight deck control placarded and the maintenance recorded in accordance with Part 5.

Note : The required instruments and equipment for specific operations are listed in Part 7.

8.2.1.6. Civil Aircraft Flight Manual, Marking and Placard Requirements.

(a) No person may operate a Nigeria-registered civil aircraft unless there is available in the aircraft—

- (1) A current, approved AFM or RFM ; or
- (2) An AOM approved by the Authority for the AOC holder ;
- (3) If no AFM or RFM exists, approved manual material, markings and placards, or any combination thereof, which provide the PIC with the necessary limitations for safe operation.

(b) No person may operate a civil aircraft within or over Nigeria without complying with the operating limitations specified in the approved AFM or RFM, markings and placards, or as otherwise prescribed by the certifying authority for the aircraft's State of Registry.

(c) Each AFM or RFM shall be updated by implementing changes made mandatory by the State of Registry.

(d) Each operator shall display in the aircraft all placards, listings, instrument markings or combination thereof, containing those operating limitations prescribed by the certifying Authority for the aircraft's State of Registry for visual presentation.

8.2.1.7.—(a) Unless otherwise authorised by the Authority, no person may operate a Nigeria Civil Aircraft unless it has had the appropriate inspections required by Subpart 8.3.

Required Aircraft And Equipment Inspections.

8.2.1.8.—(a) Except as provided in 8.2.1.6, no person may operate a civil aircraft in commercial air transport operations unless it has within it the following current and approved documents :

Documents to be Carried on Aircraft-all Operations.

- (1) Certificate of Aircraft Registration issued to the owner.

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- (2) Certificate of Airworthiness.
- (3) Aircraft Journey Log.
- (4) Aircraft Radio Licence.
- (5) List of passenger names and points of embarkation and destination, if applicable.
- (6) Cargo manifest including special loads information.
- (7) Aircraft Technical Log.
- (8) A certified true copy of the AOC.
- (9) Noise Certificate, if required.
- (10) AFM or RFM, for aeroplanes or helicopters.
- (11) Part(s) of the Operations Manual relevant to operation(s) conducted.
- (12) MEL.
- (13) Category II or III Manual, as applicable.
- (14) Operational Flight Plan, for all international flights.
- (15) Filed ATC flight plan.
- (16) NOTAM/ briefing documentation.
- (17) Meteorological information.
- (18) Mass and balance documentation.
- (19) Roster of special situation passengers.
- (20) Maps and charts for routes of proposed flight or possibly diverted flights.
- (21) Forms for complying with the reporting requirements of the Authority and the AOC holder.
- (22) For international flights, a general declaration for customs.
- (23) Any documentation that may be required by the Authority or States concerned with a proposed flight.
- (24) The appropriate licences for each member of the flightcrew.
- (25) Copy of the release to service, if any, in force with respect to the aircraft.
- (26) Search and rescue information, for international flights

(b) Except as provided in 8.2.1.6, no person may operate a civil aircraft in general aviation operations or aerial work operations unless it has within it the following current and approved documents :

- (1) Certificate of Aircraft Registration issued to the owner.
- (2) Certificate of Airworthiness.
- (3) Aircraft Journey Log.
- (4) Aircraft Radio License, for international flights.
- (5) List of passenger names and points of embarkation and destination, if applicable.
- (6) Cargo manifest including special loads information.
- (7) The appropriate licences for each member of the flight crew.
- (8) Copy of the release to service, if any, in force with respect to the aircraft, or technical log, as applicable.
- (9) Noise certificate, if required.
- (10) AFM or RFM, for aeroplanes or helicopters.
- (11) Category II or III Manual, as applicable.
- (12) Operational Flight Plan, for all international flights.
- (13) NOTAM/ briefing documentation.
- (14) Maps and charts for routes of proposed flight or possibly diverted flights.
- (15) Forms for complying with the reporting requirements of the Authority.
- (16) For international flights, a general declaration for customs.
- (17) Aerial work certificate for aerial work operators.
- (18) Search and rescue information, for international flights.
- (19) Any documentation that may be required by the Authority or States concerned with a proposed flight.

Note : “*Special situation passengers*” includes armed security personnel, deportees, persons in custody, and persons with special medical needs.

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Operations of Foreign-Registered General Aviation Aircraft.

8.2.1.9.—(a) No person shall operate a foreign-registered aircraft in general aviation in Nigeria except in accordance with the terms and conditions of the Flight Operations Clearance Certificate (FOCC) and the Maintenance Clearance Certificate (MCC) issued by the Authority and in force in respect of that aircraft.

(b) The FOCC and MCC shall be issued for a period not exceeding six (6) months.

(c) The FOCC and MCC will be renewed only once for a maximum period of six (6) months.

8.3. AIRCRAFT MAINTENANCE AND INSPECTION REQUIREMENTS

Applicability.

8.3.1.1.—(a) This Subpart prescribes the rules governing the maintenance and inspection of Nigeria registered civil aircraft operating within or outside Nigeria.

(b) Where any aircraft, not registered in Nigeria and operating under an inspection programme approved or accepted by the State of Registry, does not have the equipment required by Nigeria for operations within Nigeria, the owner/operator shall ensure that such equipment is installed and inspected in accordance with the requirements of the State of Registry, acceptable to the Authority before operation of that aircraft in Nigeria.

(c) Annual inspections in 8.3.1.4 and Annual Inspections plus 100 hour inspections in Subsection 8.3.1.4 do not apply to—

(1) An aircraft that carries a special flight permit, a current experimental certificate, or a provisional airworthiness certificate ;

(2) An aircraft subject to the requirements of progressive inspections in Subsection 8.3.1.5 ;

(3) An aircraft subject to the requirements of a continuous airworthiness maintenance inspections in Subsection 8.3.1.6 ; and

(4) A large aeroplane, a turbine-powered multi-engine aeroplane and a turbine-powered rotorcraft when the operator elects to inspect that rotorcraft in accordance with continuous airworthiness maintenance inspections in Subsection 8.3.1.6.

General.

8.3.1.2.—(a) The registered owner or operator of an aircraft is responsible for maintaining that aircraft in an airworthy condition, including compliance with all airworthiness directives.

(b) No person may perform maintenance, preventive maintenance, or alterations on an aircraft other than as prescribed in this subpart and other applicable regulations, including Part 5.

(c) No person may operate an aircraft for which a manufacturer's maintenance manual or instructions for continued airworthiness has been issued that contains an airworthiness limitations section unless the mandatory replacement times, inspection intervals and related procedures set forth in operations specifications approved by the Authority under Part 9 for AOC holders, or in accordance with an inspection programme approved under this subsection are complied with.

(d) The owner or operator shall use one of the following inspection programmes as appropriate for the aircraft and the type operation :

- (1) Annual inspection ;
- (2) Annual/100 hour inspection ;
- (3) Progressive ; or
- (4) Continuous airworthiness maintenance programme.

(e) No aircraft shall be approved for return to service after inspection unless the replacement times for life-limited parts specified in the aircraft specification-type data sheets are complied with and the aircraft, including airframe, engines, propellers, rotors, appliances, and survival and emergency equipment, is inspected in accordance with the selected inspection programme.

(f) Each person wishing to establish or change an approved inspection programme shall submit the programme for approval by the Authority and shall include in writing-

(1) Instructions and procedures for the conduct of inspection for the particular make and model aircraft, including necessary tests and checks. The instructions shall set forth in detail the parts and areas of the aeronautical products, including survival and emergency equipment required to be inspected ; and

(2) A schedule for the inspections that shall be performed expressed in terms of time in service, calendar time, number of system operations or any combination of these.

(g) When an operator changes from one inspection programme to another, the operator shall apply the time in service, calendar times, or cycles of operation accumulated under the previous programme, in determining when the inspection is due under the new programme.

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Annual
Inspections.

8.3.1.3.—(a) An annual inspection programme may be used for non-complex aircraft with a maximum certificated take-off mass of less than 5700 kg (aeroplanes)/3,175 kg (helicopters) that are not used for compensation or hire.

(b) An annual inspection under this paragraph may be performed by an AMT holding an IA in accordance with Part 2 or an AMO.

(c) No person may operate an aircraft unless, within the preceding 12 calendar-months, the aircraft has had—

(1) An annual inspection in accordance with Part 5 and has been approved for return to service by an AMT holding an IA issued in accordance with Part 2 or an AMO certificated in accordance with Part 6, or.

(2) An inspection for the issuance of an airworthiness certificate completed by the Authority in accordance with Part 5.

Annual/100
Hour
Inspections.

8.3.1.4.—(a) No person may operate a non-complex aircraft with a certificated maximum take-off mass less than 5700 kg (aeroplanes)/3,175kg (helicopters) carrying any person (other than a crewmember) for compensation or hire, and no person may give flight instruction for compensation or hire in an aircraft which that person provides, unless—

(1) Within the preceding 100 hours of time in service the aircraft has received an annual or a 100-hour inspection, and

(2) Been approved for return to service in accordance with Part 5 of these regulations.

(b) The 100-hour limitation may be exceeded by not more than 10 hours while en route to reach a place where the inspection can be done. The excess time used to reach a place where the inspection can be done must be included in computing the next 100 hours of time in service.

(c) An annual inspection under this paragraph may be performed and released to service by an AMT holding an IA issued in accordance with Part 2 or an AMO certificated in accordance with Part 6.

(d) A 100-hour inspection under this paragraph may be performed and released to service by an AMT holding an IA issued in accordance with Part 2 or an AMO certificated in accordance with Part 7.

Progressive
Inspections.

8.3.1.5.—(a) A progressive inspection programme may be used for aircraft with a maximum certificated take-off mass of less than 5700 kg (aeroplanes)/3,175kg (helicopters)

(b) Aircraft inspected under a progressive inspection programme may be used for aircraft engaged in compensation or hire.

(c) Progressive inspection. Each registered owner or operator of an aircraft desiring to use a progressive inspection programme shall submit a written request to the Authority, and shall provide—

(1) An AMT holding an IA in accordance with Part 2, an AMO appropriately rated in accordance with Part 6, or the manufacturer of the aircraft to supervise or conduct the progressive inspection ;

(2) A current inspection procedures manual available and readily understandable to pilot and maintenance personnel containing, in detail—

(i) An explanation of the progressive inspection, including the continuity of inspection responsibility, the making of reports, and the keeping of records and technical reference material ;

(ii) An inspection schedule, specifying the intervals in hours or days when routine and detailed inspections will be performed and including instructions for exceeding an inspection interval by not more than 10 hours while en-route and for changing an inspection interval because of service experience.

(iii) Sample routine and detailed inspection forms and instructions for their use ; and

(iv) Sample reports and records and instructions for their use ;

(3) Enough housing and equipment for necessary disassembly and proper inspection of the aircraft ; and

(4) Appropriate current technical information for the aircraft.

(d) The frequency and detail of the progressive inspection shall provide for the complete inspection of the aircraft within each 12 calendar-months and be consistent with the current manufacturer's recommendations, field service experience, and the kind of operation in which the aircraft is engaged.

(e) The progressive inspection schedule shall ensure that the aircraft, at all times, will be airworthy and will conform to all applicable aircraft specifications, type certificate data sheets, airworthiness directives, and other approved data acceptable to the Authority.

(f) Each owner/operator shall include in the inspection programme the name and address of the person responsible for the scheduling of the inspections required by the programme and provide a copy of the programme to the person performing inspection on the aircraft.

(g) If the progressive inspection is discontinued, the owner or operator shall immediately notify the Authority, in writing, of the discontinuance.

(1) After the discontinuance, the first annual inspection under Part 8 is due within 12 calendar-months after the last complete inspection of the aircraft under the progressive inspection.

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(2) The 100-hour inspection is due within 100 hours after that complete inspection.

(3) A complete inspection of the aircraft, for the purpose of determining when the annual and 100 hour inspections are due, requires a detailed inspection of the aircraft and all its components in accordance with the progressive inspection.

(4) A routine inspection of the aircraft and a detailed inspection of several components are not considered to be a complete inspection.

Continuous
Airworthiness
Maintenance
Inspection.

8.3.1.6.—(a) The registered owner or operator of each large aeroplane certificated with a maximum take-off mass of over 5700 kg , turbine-powered multi-engine aeroplane, and turbine-powered rotorcraft shall select, identify in the aircraft maintenance records, and use one of the following continuous airworthiness maintenance inspection programmes for the inspection of the aircraft—

(1) A current inspection programme recommended by the manufacturer ;

(2) A continuous airworthiness maintenance programme for that make and model of aircraft currently approved by the Authority for use by an AOC holder ; or

(3) Any other inspection programme established by the registered owner or operator of that aircraft and approved by the Authority.

(b) Each owner/operator shall include in the selected inspection programme the name and address of the person responsible for the scheduling of the inspections required by the programme and provide a copy of the programme to the person performing inspection on the aircraft.

Note : The aircraft manufacturer's inspection programme and any other inspection programme approved by the Authority, will specify who can perform aircraft maintenance, inspections and return of the aircraft to service.

Changes to
Aircraft
Maintenance
Inspection
Programmes.

8.3.1.7.—(a) Whenever the Authority finds that revisions to an approved inspection programme are necessary for the continued adequacy of the programme, the owner or operator shall, after notification by the Authority, make any changes in the programme found to be necessary.

(b) The owner or operator may petition the Authority to reconsider the notice, within 30 days after receiving that notice.

(c) Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Authority.

8.3.1.8.—(a) Each owner or operator of an aircraft shall—

Required
Maintenance.

(1) Have that aircraft inspected as prescribed in Part 8.3 and discrepancies repaired as prescribed in the Performance Rules of Part 5 ;

(2) Repair, replace, remove, or inspect any inoperative instruments or items of equipment at the next required inspection, except when permitted to be deferred under the provisions of a Minimum Equipment List (MEL) ;

(3) Ensure that a placard has been installed on the aircraft when listed discrepancies include inoperative instruments or equipment ; and

(4) Ensure that maintenance personnel make appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service.

8.3.1.9.—(a) Except for records maintained by an AOC holder, each registered owner or operator shall retain the following records until the work is repeated or superseded by other work of equivalent scope and detail—

Maintenance
and
Inspection
Records
Retention.

(1) Records of the maintenance, preventive maintenance, minor modifications, and records of the 100-hour, annual, and other required or approved inspections, as appropriate, for each aircraft (including the airframe) and each engine, propeller, rotor, and appliance of an aircraft to include—

(i) A description (or reference to data acceptable to the Authority) of the work performed,

(ii) The date of completion of the work performed ; and

(iii) The signature and certificate number of the person approving the aircraft for return to service.

(2) Records containing the following information—

(i) The total time-in-service of the airframe, each engine, each propeller, and each rotor ;

(ii) The current status of all life-limited aeronautical products ;

(iii) The time since last overhaul of all items installed on the aircraft which are required to be overhauled on a specified time basis ;

(iv) The current inspection status of the aircraft, including the time since the last inspection required by the inspection programme under which the aircraft and its appliances are maintained ;

(v) The current status of applicable Airworthiness Directives including, for each, the method of compliance, the Airworthiness Directive number, and revision date. If the Airworthiness Directive involves a recurring action, include the time and date when the next action is required.

(vi) Copies of the forms prescribed by this chapter for each major modification to the airframe and currently installed engines, rotors, propellers, and appliances.

(b) The records specified in paragraph (a) of this section shall be retained and transferred with the aircraft at the time the aircraft is sold or leased.

(c) A list of defects shall be retained until the defects are repaired and the aircraft is approved for return to service.

(d) The owner or operator shall make all maintenance records required by this subsection available for inspection by the Authority.

(e) The records in 8.3.1.9(a) 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 8.3.1.9.

(f) For a minimum period of one year after the signing of the maintenance release.

Note : Maintenance records for an AOC holder are in Part 9 : 9.4.1.8.

Lease or Sale of Aircraft-Transfer of Maintenance Records.

8.3.1.10.—(a) Any owner or operator who sells or leases a Nigeria-registered aircraft shall transfer to the purchaser/lessor, at the time of sale or lease, the records identified in § 8.3.1.9 of that aircraft, in plain language form or in coded form at the election of the purchaser/lessor if the coded form provides for the preservation and retrieval of information in a manner acceptable to the Authority.

Modifications and Repairs.

8.3.1.11.—(a) All modifications and repairs shall comply with airworthiness requirements acceptable to the State of Registry. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

8.4. FLIGHTCREW REQUIREMENTS

Composition of the Flightcrew.

8.4.1.1.—(a) The number and composition of the flight crew may not be less than that specified in the flight manual or other documents associated with the airworthiness certificate.

(b) Where radio equipment is installed in the aircraft, the flight crew shall include at least one member who holds a valid radio licence authorising operation of the type of radio transmitting equipment to be used.

(c) When navigation necessary for the safe operation of the aeroplane cannot be accomplished from the pilot's station the flight crew shall include a member who holds a flight navigator licence.

(d) A co-pilot (CP) is required for IFR commercial air transport operations, unless the Authority has issued an exemption in accordance with the exemption process in Part 1 of these regulations, for the use of an autopilot in lieu of a co-pilot. This exemption shall be for domestic operations only and aeroplanes weighting less than 5700 kg or helicopters weighting less than 3,175 kg.

(e) When a separate flight engineer's station is incorporated in the design of an aeroplane and the flight engineer function cannot be accomplished from the pilot's station by a pilot who holds a flight engineer licence without interference with regular duties, the flight crew shall include at least one crewmember who holds a flight engineer licence especially assigned to that station.

8.4.1.2.—(a) The PIC shall ensure that the licences of each flight crewmember have been issued or rendered valid by the State of Registry, contain the proper ratings, and that all that the flight crewmembers has maintained recency of experience.

Flightcrew
Qualifications.

(b) No person may operate a civil 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.

(c) The owner or operator of an aircraft shall ensure that the flight crewmembers demonstrate the ability to speak and understand the English language used for radiotelephony communications and for international operations.

8.4.1.3.—(a) The Authority may authorise a pilot to operate an aircraft requiring a type rating without a type rating for up to 60 days, provided—

Authorisation
in Lieu of a
Type Rating.

(1) The Authority has determined that an equivalent level of safety can be achieved through the operating limitations on the authorisation ;

(2) The applicant shows that compliance with this subsection is impracticable for the flight or series of flights ;

(3) The operations—

(i) Involve only a ferry flight, training flight, test flight, or skill test for a pilot licence or rating ;

(ii) Are within (Nigeria), unless, by previous agreement with the Authority of the other State, the aircraft is flown to an adjacent contracting State for maintenance ;

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(iii) Are not for compensation or hire unless the compensation or hire involves payment for the use of the aircraft for training or taking a skill test ;
and

(iv) Involve only the carriage of crewmembers considered essential for the flight.

(4) If the purpose of the authorisation provided by this paragraph cannot be accomplished within the time limit of the authorisation, the Authority may authorise an additional period of up to 60 days.

Licences
Required.

8.4.1.4.—(a) Except as provided for in Subsection 8.4.1.3, no person may act as PIC or in any other capacity as a required flight crewmember of a civil aircraft of :

(1) Nigeria registry, unless he or she carries in his or her personal possession the appropriate and current licence for that flightcrew position for that type of aircraft and a valid medical certificate ;

(2) Foreign registry, unless he or she carries in his or her personal possession a valid and current licence for that type of aircraft issued or validated by the State in which the aircraft is registered.

Flightcrew-
Limitations
on use of
Services for
Commercial
air
Transport.

8.4.1.5.—(a) No person may serve as a flight crewmember, nor may any AOC holder use a flight crewmember in commercial air transport unless that person is otherwise qualified for the operations for which he or she is to be used.

(b) The qualifications, training and proficiency checking for flight crewmembers engaged in commercial air transport operations are provided in Subpart 8.10.

(c) The recency and proficiency requirements for flight crewmembers engaged in commercial air transport operations are listed in paragraphs 8.4.1.10 -8.4.1.14.

Note : The qualifications for flight crewmembers engaged in commercial air transport are provided in Subpart 8.10.

Rating
Required for
IFR
Operations.

8.4.1.6.—(a) No person may act as pilot of a civil aircraft under IFR or in weather conditions less than the minimums prescribed for VFR flight unless-

(1) The pilot holds an instrument rating or an ATP licence with an appropriate aircraft category, class, and type (if required) rating for the aircraft being flown ;

(2) In the case of helicopter, the pilot holds a helicopter instrument rating ;

8.4.1.7.—(a) Except as shown in paragraph (b), no person may act as a pilot crew member of a civil aircraft in a Category II/III operation unless-

Special
Authorisation
Required for
Category II/
III Opera-
tions.

(1) In the case of a PIC, he or she holds a current Category II or II pilot authorization issued by the State of Registry for that aircraft type.

(2) In the case of a CP, he or she is authorized by the State of Registry to act as CP in that aircraft type in Category II/III operations.

(b) An authorisation is not required for individual pilots of an AOC holder that has operations specifications approving Category II or III operations.

8.4.1.8.—(a) Each pilot shall show the aeronautical training and experience used to meet the requirements for a licence or rating, or recency of experience, by a reliable record.

Pilot
Logbooks.

(b) Each PIC shall carry his or her logbook on all general aviation international flights.

(c) A student pilot shall carry his or her logbook, including the proper flight instructor endorsements, on all solo cross-country flights.

Note : The acceptable methods of logging experience are outlined in Part 2-Personnel Licensing.

8.4.1.9.—(a) The recency and proficiency requirements for general aviation operations are listed in Part 2.3.1.6.

Pilot
Recency and
Proficiency-
General
Aviation
Operations.

8.4.1.10.—(a) No person may act as PIC or co-pilot of an aircraft carrying passengers unless, within the preceding 90 days that pilot has :

Pilot
Recency-
Takeoff and
Landings,
Commercial
air Transport
Operations.

(1) Made 3 takeoffs and landings as the sole manipulator of the flight controls in an aircraft of the same category and class and if a type rating is required, of the same type or in a flight simulation training device approved for the purpose.

(2) For a tailwheel aeroplane, made the 3 takeoffs and landings in a tailwheel aeroplane with each takeoff and landing to a full stop.

(3) For night operations, made the 3 takeoffs and landings required by paragraph (a)(1) at night with each takeoff and landing to a full stop.

(b) A pilot who has not met the recency of experience for takeoffs and landings shall satisfactorily complete a requalification curriculum acceptable to the Authority.

(c) Requirements of paragraphs (a) and (b) may be satisfied in a flight simulator approved by the Authority.

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Pilot
Recency-IFR
Operations.

8.4.1.11.—(a) No person may act as a pilot under IFR, nor in IMC, unless he or she has, within the past 12 calendar-months-

(1) Logged at least 6 hours of instrument flight time including at least 3 hours in flight in the category of aircraft ; and

(2) Completed at least 6 instrument approaches.

(b) A pilot who has completed an instrument proficiency check with an authorised representative of the Authority retains currency for IFR operations for 12 calendar-months following that check.

Pilot
Recency
Cruise Relief
Pilot.

8.4.1.12.—(a) No person may act as a cruise relief pilot in commercial air transport unless within the preceding 90 days, that pilot has either :

(1) Operated as pilot-in-command, co-pilot or cruise relief pilot on the same type of aircraft ; or

(2) Carried out flying skill refresher training including normal, abnormal and emergency procedures specific to cruise flight on the same type of aircraft or in a flight simulator approved for the purpose, and has practised approach and landing procedures, where the approach and landing procedure practice may be performed as the pilot who is not flying the aircraft.

(b) When a cruise relief pilot is flying several variants of the same type of aircraft or different types of aircraft with similar characteristics in terms of operating procedures, systems, and handling, the recency or refresher training may be combined, if approved by the Authority.

Pilot
Recency-
Night Vision
Goggles.

8.4.1.13.—(a) No person may act as PIC in a night vision goggle operation unless that pilot has completed the required training in Part 2.3.2.9, and has performed and logged the following tasks as the sole manipulator of the controls on a flight during a night vision goggle operation, within the preceding 60 days to carry passengers on board, or within the preceding 120 days to act as PIC without passengers on board :-

(1) 3 takeoffs and landings, with each takeoff and landing including a climb out, cruise, descent, and approach phase of flight, if the pilot intends to use night vision goggles during the takeoff and landing phase of flight ;

(2) 3 hovering tasks, if the pilot intends to use night vision goggles when operating helicopters or powered- lifts during the hovering phase ;

(3) 3 area departure and area arrival tasks ;

(4) 3 tasks of transitioning from aided night flight to unaided night flight and back to aided night flight.

(5) 3 night vision goggle operations, or when operating helicopters or powered-lifts, 6 night vision goggle operations, or

(b) Successfully completed the night vision goggles proficiency check required in Part 2.3.2.9, with the Authority or an authorised representative of the Authority.

8.4.1.14.—(a) The qualification, training and proficiency checking requirements for flight crewmembers engaged in commercial air transport are listed in Subsection 8.10. Additionally, the following requirements in (b)-(c) shall be met, as applicable.

Pilot
Proficiency-
Commercial
Air
Transport
Operations.

(b) All pilots. No person shall act as a pilot of an aircraft unless he or she has successfully passed two proficiency checks within months, conducted by an authorised representative of Authority. The proficiency check requirement—

(1) 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 aircraft, including where the operations may be conducted under IFR ;

(2) Shall not be satisfied by the conduct of two checks that are similar and which occur within a period of four consecutive months

(3) May be combined for several variants of the same type of aircraft or different types of aircraft with similar characteristics in terms of operating procedures, systems and handling, if approved by the Authority.

(c) Single pilot operations. No person shall act as PIC of an aircraft unless he or she has completed the following proficiency requirement in the class of aeroplane in an environment representative of the operation :

(1) For operations under the IFR or at night, have accumulated at least 50 hours flight time on the class of aeroplane, of which at least 10 hours shall be as PIC ;

(2) 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 (1) above ;

(3) 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 (1) above ; and

(4) Have successfully completed training programmes that include, in addition to the operator's training programme, passenger briefing with respect to emergency evacuation, autopilot management, and the use of simplified in-flight documentation.

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(d) The aircraft pilot proficiency check and the instrument proficiency check must be accomplished by the Authority or an authorised representative of the Authority in the category, class and type of aircraft to be operated, or in a flight simulation training device approved for the purpose, to the requirements in Part 8 : 8.10.1.20 and IS: 8.10.1.20 and the applicable skill test in Nig. CARs.

(e) Night vision goggles operation. No person may act as PIC in a night vision goggle operation unless, the pilot has completed the required training in Part 2 : 2.3.2.9, and meets either the :

(1) Currency requirements in paragraph 8.4.1.13(a) above, or

(2) Passes the night vision goggles proficiency check required by paragraph 8.4.1.13(b) above with the Authority or an authorised representative of the Authority.

Pilot
Privileges
and
Limitations.

8.4.1.15.—(a) A pilot may conduct operations only within the general privileges and limitations of each licence, rating or authorisation as specified in Part 2 of these regulations.

Operation on
More than
One Aircraft
Type or
Variant.

8.4.1.16.—(a) No flight crew member may operate on more than two aircraft types or variants.

(b) An operator shall ensure that a flight crew member does not operate on more than one aircraft type or variant unless the flight crew member is competent to do so.

(c) The operator shall ensure that the differences and/or similarities of the aircraft concerned justify such operations, taking into account the following :

(i) the level of technology ;

(ii) operational procedures ;

(iii) handling characteristics.

(d) An operator shall specify appropriate procedures and/or operational restrictions, approved by the Authority, in the Operations Manual, for any operation on more than one aircraft type or variant covering :

(i) the flight crew members' minimum experience level ;

(ii) the minimum experience level on one type or variant before beginning training for and operation of another type or variant ;

(iii) the process whereby flight crew qualified on one type or variant will be trained and qualified on another type or variant ;

(iv) all applicable recent experience requirements for each type or variant.

(e) Before exercising the privileges of two aircraft types or variants :

(i) flight crew members must have completed two consecutive proficiency checks and must have 500 hours in the relevant crew position ;

(ii) only one aircraft type or variant may be flown in any one flight duty period ;

(iii) before commencing training for and operation of another aircraft type or variant, flight crew members must have completed three(3) months and 150 hours flying on the base aircraft, and this must include at least one proficiency check ;

(iv) after completion of the initial line check on the new aircraft type or variant, 50 hours flying or 20 sectors must be achieved solely on aircraft of the new type rating.

8.5. CREWMEMBER DUTIES AND RESPONSIBILITIES

8.5.1.1. Authority and Responsibility of the PIC.

(a) The PIC shall be responsible for the operations and safety of the aircraft and for the safety of all persons on board, during flight.

(b) The PIC of an aircraft shall have final authority as to the operation of the aircraft while he or she is in command.

(c) The PIC of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with the rules of the air, except that the PIC may depart from these rules in emergency circumstances that render such departure absolutely necessary in the interests of safety.

(d) The pilot-in-command of an aeroplane equipped with an airborne collision avoidance system (ACAS II) shall ensure that each flight crew member has been appropriately trained to competency in the use of ACAS II equipment and the avoidance of collision.

8.5.1.2. Compliance with Local Regulations.

(a) The PIC shall comply with the relevant laws, regulations and procedures of the States in which the aircraft is operated.

(b) If an emergency situation which endangers the safety of the aircraft or persons necessitates the taking of action which involves a violation of local regulations or procedures, the PIC shall—

(1) Notify the appropriate local Authority without delay ;

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(2) Submit a report of the circumstances, if required by the State in which the incident occurs ; and

(3) Submit a copy of this report to the State of Operator if an AOC or State of Register if in general aviation.

(c) Each PIC shall submit reports specified in paragraph (b) to the Authority within 10 days in the form prescribed.

8.5.1.3. Negligent or Reckless Operations of the Aircraft.

(d) No person may operate an aircraft in a negligent or reckless manner so as to endanger life or property of others.

8.5.1.4. Fitness of Flight Crewmembers.

(a) No person may act as PIC or in any other capacity as a required flight crew member when he or she is aware of any decrease in his or her medical fitness which might render the crewmember unable to safely exercise the privileges of his or her licence.

(b) The PIC shall be responsible for ensuring that a flight is not—

(1) Commenced if any flight crewmember is incapacitated from performing duties by any cause such as injury, sickness, fatigue, the effects of alcohol or drugs ; or

(2) Continued beyond the nearest suitable aerodrome if a flight crewmember's capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness or lack of oxygen.

8.5.1.5. Prohibition on use of Psychoactive Substances, Including Narcotics, Drugs or Alcohol.

(a) No person may act or attempt to act as a crewmember of a civil aircraft-

(1) Within 8 hours after the consumption of any alcoholic beverage ;

(2) While under the influence of alcohol ; or

(3) While using any psychoactive substance that affects the person's faculties in any way contrary to safety.

(b) A crewmember shall, up to 8 hours before or immediately after acting or attempting to act as a crewmember, on the request of a law enforcement officer or the Authority, submit to a test to indicate the presence of alcohol or other psychoactive substances in the blood.

(c) Whenever there is a reasonable basis to believe that a person may not be in compliance with this paragraph and upon the request of the Authority, that person shall furnish the Authority or authorise any clinic, doctor, or other person to release to the Authority, the results of each blood test taken for presence of alcohol or narcotic substances up to 8 hours before or immediately after acting or attempting to act as a crewmembers.

(d) Any test information provided to the Authority under the provisions of this section may be used as evidence in any legal proceeding.

8.5.1.6. Flight Crewmember use of Seat Belts and Shoulder Harnesses.

(a) Each flight crewmember shall have his or her seat belts fastened during takeoff and landing and all other times when seated at his or her station.

(b) Each flight crewmember occupying a station equipped with a shoulder harness shall fasten that harness during takeoff and landing, except that the shoulder harness may be unfastened if the crewmember cannot perform the required duties with the shoulder harness fastened.

(c) Each occupant of a seat equipped with a combined safety belt and shoulder harness shall have the combined safety belt and shoulder harness properly secured about that occupant during takeoff and landing and be able to properly perform assigned duties.

(d) At each unoccupied seat, the safety belt and shoulder harness, if installed, shall be secured so as not to interfere with crewmembers in the performance of their duties or with the rapid egress of occupants in an emergency.

8.5.1.7. Flight Crewmembers At Duty Stations.

(a) Each required flight crewmember shall remain at the assigned duty station during take-off and landing and critical phases of flight.

(b) Each flight crewmember shall remain at his or her station during all phases of flight unless—

(1) Absence is necessary for the performance of his or her duties in connection with the operation ;

(2) Absence is necessary for physiological needs, provided one qualified pilot remains at the controls at all times ; or

(3) The crewmember is taking a rest period and a qualified relief crewmember replaces him or her at the duty station.

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(i) For the assigned PIC during the en route cruise portion of the flight by a pilot who holds an airline transport pilot licence and an appropriate type rating, and who is currently qualified as PIC or CP, and is qualified as PIC of that aircraft during the *en route* cruise portion of the flight ; and

(ii) In the case of the assigned CP, by a pilot qualified to act as PIC or Co-Pilot of that aircraft during en route operations

8.5.1.8. Required Crewmember Equipment.

(a) Each crew member involved in night operations shall have a flashlight at his or her station.

(b) Each pilot crewmember shall have at his or her station an aircraft checklist containing the normal, abnormal and emergency procedures relating to the operation of the aircraft for that type aircraft.

(c) Each pilot crew member shall have at his or her station 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.

(d) Each flight crewmember assessed as fit to exercise the privileges of a licence subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when performing as a required crewmember in commercial air transport.

8.5.1.9. Compliance with Checklists.

(a) The PIC shall ensure that the flightcrew follows the approved checklist procedures when operating the aircraft.

8.5.1.10. Search and Rescue Information.

(a) For all international flights, the PIC shall have on board the aircraft essential information concerning the search and rescue services in the areas over which he or she intends to operate the aircraft.

(b) The owner of the aeroplane, or in the case where it is leased, the lessee, shall at all times have available for immediate communication to rescue coordination centres, lists containing information on the emergency and survival equipment carried on board the aeroplane engaged in international air navigation. The information shall include, as applicable, the number, colour and type of life rafts and pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of the emergency portable radio equipment.

8.5.1.11. Production of Aircraft and Flight Documentation.

(a) The PIC shall, within a reasonable time of being requested to do so by a person authorised by the Authority, produce to that person the documentation required to be carried on the aircraft.

8.5.1.12. Locking of Flight Deck Compartment Door : Commercial Air Transport.

(a) The PIC shall ensure that the flight deck compartment door (if installed) is locked at all times during passenger-carrying commercial air transport operations, except as necessary to accomplish approved operations or to provide for emergency evacuation.

(b) No person may operate a passenger carrying aeroplane having a maximum certificated takeoff mass in excess of 45,000 kg or with a passenger capacity greater than 60 unless the flightcrew compartment door is closed and locked.

(c) From the time all external doors are closed following embarkation; until.

(d) Any such door is opened for disembarkation ; except.

(e) When necessary to permit access and egress by authorised persons.

8.5.1.13. Admission to the Flight Deck-Commercial Air Transport.

(a) No person may admit any person to the flight deck of an aircraft engaged in commercial air transport operations unless the person being admitted is—

(1) An operating crewmember ;

(2) A representative of the Authority responsible for certification, licensing or inspection, if this is required for the performance of his or her official duties ; or

(3) Permitted by and carried out in accordance with instructions contained in the Operations Manual.

(b) The PIC shall ensure that—

(1) In the interest of safety, admission on the flight deck does not cause distraction and/or interference with the flight's operations ; and

(2) All persons carried on the flight deck are made familiar with the relevant safety procedures.

8.5.1.14. Admission of Inspector to the Flight Deck.

(a) Whenever, in performing the duties of conducting an inspection, an inspector from the Authority presents [Inspector's Credential Form] to the PIC, the PIC shall give the inspector free and uninterrupted access to the flight deck of the aircraft.

8.5.1.15. Duties During Critical Phases of Flight : Commercial Air Transport

(a) No flight crewmember may perform any duties during a critical phase of flight except those required for the safe operation of the aircraft.

(b) No PIC may permit a flight crewmember to engage in any activity during a critical phase of flight which could distract or interfere with the performance of his or her assigned duties.

8.5.1.16. Manipulation of the Controls-Commercial Air Transport.

(a) No PIC may allow an unqualified person to manipulate the controls of an aircraft during commercial air transport operations.

(b) No person may manipulate the controls of an aircraft during commercial air transport operations unless he or she is qualified to perform the applicable crewmember functions and is authorised by the AOC holder.

8.5.1.17. Simulated Abnormal Situations In Flight: Commercial Air Transport.

(a) No person may cause or engage in simulated abnormal or emergency situations or the simulation of IMC by artificial means during commercial air transport operations.

8.5.1.18. Completion of the Technical Log-Commercial Air Transport and Aerial Work.

(a) The PIC shall ensure that all portions of the technical log are completed at the appropriate points before, during and after flight operations, including :

- (1) The journey logbook and
- (2) The aircraft maintenance records section.

Note : See Part 9 : 9.3.1.5 and 9.4.1.8 for details of the journey logbook and the aircraft maintenance records section of the technical log.

8.5.1.19. Reporting Mechanical Irregularities.

(a) The PIC shall ensure that all mechanical irregularities occurring during flight time are—

(b) For general aviation operations, entered in the aircraft logbook and disposed of in accordance with the MEL or other approved or prescribed procedure.

(c) For commercial air transport operations and aerial work operations, entered in the aircraft maintenance records section of the technical log for the aircraft at the appropriate points before, during and at the end of that flight time.

8.5.1.20. Reporting of Facility And Navigation Aid Inadequacies.

(a) Each crewmember 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.

8.5.1.21. Reporting of Hazardous Conditions.

(a) The PIC shall report to the appropriate ATC facility, without delay and with enough detail to be pertinent to the safety of other aircraft, any hazardous flight conditions encountered en route, including those associated with meteorological conditions.

8.5.1.22. Reporting of Incidents.

(a) Air traffic incident report. The PIC shall submit, without delay, an air traffic incident report whenever an aircraft in flight has been endangered by-

- (1) A near collision with another aircraft or object ;
- (2) Faulty air traffic procedures or lack of compliance with applicable procedures by ATC or by the flightcrew ; or
- (3) A failure of ATC facilities.

(b) Birds. In the event a bird constitutes an in-flight hazard or an actual bird strike occurs, the PIC shall, without delay—

- (1) Inform the appropriate ground station whenever a potential bird hazard is observed ; and
- (2) Submit a written bird strike report after landing.

(c) Dangerous Goods. The PIC shall inform the appropriate ATC facility, if the situation permits, when an in-flight emergency occurs involving dangerous goods on board.

(d) Unlawful Interference. The PIC shall submit a report to the local authorities and to the Authority, without delay, following an act of unlawful interference with the crewmembers on board an aircraft.

8.5.1.23. Accident Notification.

(a) The PIC shall notify the nearest appropriate Authority, by the quickest available means, of any accident involving his or her aircraft that results in serious injury or death of any person, or substantial damage to the aircraft or property.

(b) The PIC shall submit a report to the Authority of any accident which occurred while he or she was responsible for the flight.

8.5.1.24. Operation of Cockpit Voice and Flight Data Recorders.

(a) The PIC shall ensure that whenever an aircraft has flight recorders installed, those recorders are operationally checked and operated continuously from the instant—

(1) For a flight data recorder, the aircraft begins its takeoff roll until it has completed the landing roll, and

(2) For a cockpit voice recorder, the initiation of the pre-start checklist until the end of the securing aircraft checklist.

(b) The PIC may not permit a flight data recorder or cockpit voice recorder to be disabled, switched off or erased during flight, unless necessary to preserve the data for an accident or incident investigation.

(c) In event of an accident or incident, the PIC shall act to preserve the recorded data for subsequent investigation upon completion of flight.

8.5.1.25. Crewmember Oxygen-Minimum Supply and use.

(a) The PIC shall ensure that breathing oxygen and masks are available to crew members in sufficient quantities for all flights at such altitudes where a lack of oxygen might result in impairment of the faculties of crew members.

(b) In no case shall the minimum supply of oxygen on board the aircraft be less than that prescribed by the Authority.

Note : The requirements for oxygen supply and use are prescribed in Part 7.1.8.12, Required Instruments and Equipment.

(c) The PIC shall ensure that all flight crewmembers, when engaged in performing duties essential to the safe operation of an aircraft in flight, use breathing oxygen continuously at cabin altitudes exceeding 3,000 m (10000 ft) for a period in excess of 30 minutes and whenever the cabin altitude exceeds 4,000 m (13000 ft).

(d) One pilot at the controls of a pressurised aircraft in flight shall wear and use an oxygen mask—

(1) For general aviation operations, at flight levels above 350, if there is no other pilot at a pilot duty station ; and

(2) For commercial air transport operations, at flight levels above 250, if there is no other pilot at a pilot duty station.

8.5.1.26. Portable Electronic Devices

(a) No PIC or SCCM may permit any person to use, nor may any person use a portable electronic device on board an aircraft that may adversely affect the performance of aircraft systems and equipment unless—

(1) For IFR operations other than commercial air transport, the PIC allows such a device before its use ; or

(2) 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

(3) The PIC informs passengers of the permitted use.

8.5.1.27. Carriage of Dangerous Goods.

(a) No person shall carry dangerous goods in an aircraft registered in Nigeria or operated in Nigeria except :

(4) With the written permission of the Authority and subject to any condition the Authority may impose in granting such permission ; and

(5) In accordance with the Technical Instructions for the Safe Transport of Dangerous Goods by Air issued by the Council of International Civil Aviation Organisation and with any variations to those instructions that the Authority may from time to time mandate and provide notification of to ICAO.

8.5.1.28. Microphones.

(a) For AOC holders operating aircraft, a required flight crew member shall use a boom or throat microphone to communicate with another flight crew member and air traffic service below the transition level or altitude.

(b) For general aviation operations in an aeroplane, helicopter or powered lift aircraft, a required flight crew member should use a boom or throat microphone to communicate with another flight crew member and air traffic service below the transition level or altitude.

(c) For aerial work operations, a required flight crew member should use a boom or throat microphone to communicate with another flight crew member and air traffic service below the transition level or altitude, as applicable to the mission.

8.5.1.29. Passenger Health and Safety.

(a) Whenever there is a reasonable basis to believe that a person may be suffering from a sickness other than air sickness, or the person displays the symptoms of a communicable disease, (*See IS: 8.5.1.29 (1)*), the pilot in command shall notify air traffic control or the Port Health Authority as applicable.

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(b)(i) Immediately upon landing, a report shall be made to the applicable Port Health Authority containing the information contained in the general declaration.

(ii) The report to the Port Health Authority shall contain, in addition to the person suspected of being inflicted, the names and contact details of the passengers seated in the same row and the two rows in front and behind, in addition to any other person known to have been in close contact with the primary person concerned.

(iii) Copies of any such report shall be submitted to the Authority.

8.6. FLIGHT PLANNING AND SUPERVISION

8.6.1.1. Submission of a Flight Plan

(a) Before operating one of the following, a pilot shall file a VFR or IFR flight plan, as applicable, for—

(1) Any flight (or portion thereof) to be provided with ATC service ;

(2) Any IFR flight within advisory airspace ;

(3) Any flight within or into designated areas, or along designated routes, when so required by the Authority to facilitate the provision of flight information, alerting and search and rescue services ;

(4) Any flight within or into designated areas, or along designated routes, when so required by the Authority to facilitate co-ordination with appropriate military units or with ATC facilities in adjacent states in order to avoid the possible need for interception for the purpose of identification ; and

(b) Any flight across international borders.

(c) The PIC shall submit a flight plan before departure or during flight, to the appropriate ATC facility, unless arrangements have been made for submission of repetitive flight plans.

(1) Unless otherwise prescribed by the Authority a pilot should submit a flight plan to the appropriate ATC facility—

(2) At least sixty minutes before departure ; or

(3) If submitted during flight, at a time which will ensure its receipt by the appropriate ATC facility at least ten minutes before the aircraft is estimated to reach—

(i) The intended point of entry into a control area or advisory area ; or

(ii) The point of crossing an airway or advisory route.

8.6.1.2. Air Traffic Control Flight Plan-commercial Air Transport.

(a) No person may takeoff an aircraft in commercial air transport if an ATC flight plan has not been filed, except as authorised by the Authority.

8.6.1.3. Contents of a Flight Plan.

(a) Each person filing an IFR or VFR flight plan shall include in it the following information—

- (1) Aircraft identification ;
- (2) Flight rules and type of flight ;
- (3) Number and type(s) of aircraft and wake turbulence category ;
- (4) Equipment ;
- (5) Departure aerodrome and alternate (if required) ;
- (6) Estimated off-block time ;
- (7) Cruising speed(s) ;
- (8) Cruising level(s) ;
- (9) Route to be followed ;
- (10) Enroute alternate aerodrome (if required) ;
- (11) Destination aerodrome and alternate(s) (if required) ;
- (12) Fuel endurance ;
- (13) Total number of persons on board ;
- (14) Emergency and survival equipment ; and
- (15) Other information.

8.6.1.4. Planned Reclearance.

(a) If during flight planning a person determines that there is a possibility depending on fuel endurance, that a flight may be able to change destinations and still comply with minimum fuel supply planning requirements, that person shall notify the appropriate ATC facility of this possibility when the flight plan is submitted.

Note : The intent of this provision is to facilitate a new clearance to a revised destination, normally beyond the filed destination aerodrome.

8.6.1.5. Changes to a Flight Plan.

(a) When a change occurs to a flight plan submitted for an IFR flight or a VFR flight operated as a controlled flight, the pilot shall report that change as soon as practicable to the appropriate ATC facility.

(b) For VFR flights other than those operated as controlled flight, the PIC shall report significant changes to a flight plan as soon as practicable to the appropriate ATC facility.

Note : Information submitted before departure regarding fuel endurance or total number of persons carried on board, if incorrect at time of departure, constitutes a significant change and shall be reported.

8.6.1.6. Closing a Flight Plan.

(a) The PIC shall make a report of arrival either in person or by radio to the appropriate ATC facility at the earliest possible moment after landing at the destination aerodrome, unless ATC automatically closes a flight plan.

(b) When a flight plan has been submitted for a portion of a flight, but not the arrival at destination, the pilot shall close that flight plan *en route* with the appropriate ATC facility.

(c) When no ATC facility exists at the arrival aerodrome, the pilot shall contact the nearest ATC facility to close the flight plan as soon as practicable after landing and by the quickest means available.

(d) Pilots shall include the following elements of information in their arrival reports—

- (1) Aircraft identification ;
- (2) Departure aerodrome ;
- (3) Destination aerodrome (only in the case of a diversionary landing) ;
- (4) Arrival aerodrome ; and
- (5) Time of arrival.

8.6.2. FLIGHT PLANNING AND PREPARATION.

8.6.2.1. Aircraft Airworthiness and Safety Precautions.

(a) The PIC may not operate a civil aircraft in flight until satisfied that—

- (1) The aircraft is airworthy, duly registered and that appropriate certificates are aboard the aircraft ;
- (2) The instruments and equipment installed in the aircraft are appropriate, taking into account the expected flight conditions ; and
- (3) Any necessary maintenance has been performed and a maintenance release, if applicable, has been issued in respect to the aircraft.

(b) For commercial air transport operations, the PIC shall certify by signing the aircraft technical log that he or she is satisfied that the requirements of paragraph (a) have been met for a particular flight.

(c) If, after passing the outer marker fix in case of precision approach, or after descending below 300 m (1 000 ft) above the heliport 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, a helicopter shall not continue its approach-to-land beyond a point at which the limits of the heliport operating minima would be infringed.

8.6.2.2. Adequacy of Operating Facilities.

(a) No person may commence a flight unless it has been determined by every reasonable means available that the ground and/or water areas and facilities available and directly required for such flight and for the safe operation of the aircraft, are adequate, including communication facilities and navigation aids.

(b) 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.

(c) 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 meteorological conditions.

(d) 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.

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

Note 1 : "Reasonable means" denotes use, at the point of departure, of information available to the PIC either through official information published by the aeronautical information services or readily obtainable in other sources.

Note 2 : ICAO Annex 6, Part 1, Attachment K, contains guidance on assessing an acceptable level of RFFS protection at aerodromes.

Note 3 : It is not intended that this guidance limit or regulate the operation of an aerodrome. The assessment performed by the operator does not in any way affect the RFFS requirements of ICAO Annex 14, Volume I, for aerodromes.

8.6.2.3. Meteorological Reports and Forecasts.

(a) Before commencing a flight, the PIC shall be familiar with all available meteorological information appropriate to the intended flight.

(b) The PIC shall include, during preparation for a flight away from the vicinity of the place of departure and for every flight under the instrument flight rules—

(1) A study of available current meteorological reports and forecasts ;
and

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

8.6.2.4. Meteorological Limitations for VFR Flights.

(a) No person will commence a flight to be conducted in accordance with VFR 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, allow VFR operations.

8.6.2.5. IFR Destination Aerodromes.

(a) No person may conduct an IFR flight unless—

(1) At the time of take-off, the meteorological conditions at the departure aerodrome are at or above the operator's established aerodrome operating minima for that operation ; and

(2) At the time of take-off or point of in-flight re-planning, 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.

Note : A partial exception is granted for commercial air transport IFR flight planning, to the effect that the meteorological conditions at the destination do not have to be at or above the approach minima to release and commence a flight, as long as the designated alternate aerodrome meets the IFR meteorological selection criteria.

8.6.2.6. IFR Destination Alternate Requirement.

(a) (AAC) No person may commence an IFR flight in an aeroplane without at least one destination alternate aerodrome listed in the flight plan unless—

(1) The duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the ETA at the aerodrome of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions ; or

(2) The aerodrome of intended landing is isolated and there is no suitable destination alternate aerodrome, and

(i) There is a standard instrument approach procedure prescribed for the aerodrome of intended landing by the jurisdictional authorities ; and

(ii) Available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two hours after the ETA—

(A) A cloud base of at least 600m (2000ft) above the airport elevation ; and

(B) Visibility will be at least 3 km (2 statute miles).

(b) (AOC) No person may commence an IFR flight in an aeroplane—

(1) without at least one destination alternate aerodrome listed in the flight plan unless—

(i) the duration of the flight from the departure aerodrome, or from the point of in-flight 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 there is a reasonable certainty that

(A) the approach and landing may be made under visual meteorological condition ; and

(B) 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

(ii) the aerodrome is isolated, and

(A) for each flight into an isolated aerodrome a point of no return shall be determined ; and

(B) 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.

(C) The fuel requirements of Subsection 8.6.2.15(b)(4)(iv) are met.

(2) without at least two destination alternate aerodromes listed in the operational and ATC flight plan when, for the destination aerodrome—

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(i) meteorological condition as at the estimated time of use will be below the operator's established aerodrome operating minima for that operation ; or

(ii) meteorological information is not available.

Note 1 : Separate runways are two or more runways at the same aerodrome configured such that if one runway is closed, operations to the other runway(s) can be conducted.

(c) (AAC) No person may commence an IFR flight in a helicopter,

(1) where no alternate aerodrome is required unless,

(i) The operation is conducted as general aviation : and

(ii) Available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two hours after the ETA :

(A) A cloud base of at least 300m (1000ft) above the aerodrome elevation, or at least 120m (400ft) above the lowest applicable approach minimum, whichever is higher ; and

(B) Visibility will be at least 3 km (2 statute miles).

Note : These should be considered as minimum values where a reliable and continuous meteorological watch is maintained. When only an "area" type forecast is available, these values should be increased accordingly.

(2) without at least one destination alternate heliport listed in the flight plan unless the available information indicates that conditions, at the heliport of intended landing and at least one alternate heliport will, at the ETA, be at or above the heliport operating minima.

(d) (AOC) *No person may commence an IFR flight in a helicopter—*

(1) without at least one destination alternate heliport listed in the flight plan unless the available information indicates that conditions, at the heliport of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions as prescribed by Nigeria or

(2) without at least two destination alternate heliports, forecast to be at or above the helicopter operating minima, listed in the operational and ATC flight plan when, at the time of flight departure, the intended heliport destination is forecast to be below the helicopter operating minima ; or

(3) If the heliport of intended landing is isolated and no suitable alternate is available, in which case a point of no return shall be determined.

(e) The ceiling and visibility requirements for operations conducted in accordance with paragraphs (a)-(d) may be reduced upon approval of the Authority for—

(1) Other categories of aircraft, such as powered-lift, and airships ;

(2) Commercial air transport where the Authority has approved alternate minima as an equivalent level of safety based on the results of a specific safety risk assessment demonstrated by the operator, which contains the following :

(i) Capabilities of the operator ;

(ii) Overall capability of the aeroplane and its systems ;

(iii) Available aerodrome technologies, capabilities and infrastructure ;

(iv) Quality and reliability of meteorological information ;

(v) Identified hazards and safety risks associated with each alternate aerodrome variation ;

(vi) Specific mitigation measures.

8.6.2.7. IFR Alternate Aerodrome Selection Criteria.

(a) If alternate minimums are published, no PIC may designate an alternate aerodrome in an IFR flight plan unless the current available forecast indicates that the meteorological conditions at that alternate at the ETA—

(1) (AAC) will be at or above those published alternate minimums upon take-off from the departing aerodrome, or

(2) (AOC) will be at or above the operators established minima for that operation upon

(i) take-off from the departing aerodrome, or

(ii) the point of in-flight re-planning.

(b) If alternate minimums are not published, and if there is no prohibition against using the aerodrome as an IFR planning alternate, each PIC shall ensure that the meteorological conditions at that alternate at the ETA will be at or above—

(1) For aeroplanes :

(i) For a precision approach procedure, a ceiling of at least 180 m (600 ft) and visibility of not less than 3 km (2 statute miles) ; or

(ii) For a non-precision approach procedure, a ceiling of at least 240 m (800 ft) and visibility of not less than 5 km (3 statute miles).

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(2) For helicopters :

(i) Ceiling 60m (200ft) above the minimum for the approach to be flown, and visibility at least 1 statute mile but never less than the minimum visibility for the approach to be flown : or

(ii) If no instrument approach procedure has been published and no special instrument approach procedure has been issued by the Authority to the operator, for the alternate airport, the ceiling and visibility minima are those allowing descent from the MEA, approach, and landing under basic VFR.

(b) The Planning Minima Table will be used in selecting IFR alternate aerodromes.

(c) 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, the operator shall specify appropriate incremental values for height of cloud base and visibility, acceptable to the State of the Operator, to be added to the operator's established aerodrome operating minima.

(d) The State of the Operator shall approve a margin of time established by the operator for the estimated time of use of an aerodrome.

Planning Minima

(Ceiling and RVR/visibility required, if applicable)

<i>Type of Approach</i>	<i>Aerodrome with</i>	
	at least 2 separate approach procedures based on 2 separate aids serving 2 separate runways (See Note 1)	at least 2 separate approach procedures based on 2 separate aids serving 1 runway or, at least 1 approach procedure based on 1 aid serving 1 runway
Precision Approach CAT II, III (ILS, LS)	Precision Approach CAT I Minima.	Non-Precision Approach Minima
Precision Approach CAT 1(ILS, MLS)	Non-Precision Approach Minima.	Circling minima or, if not available, non-precision approach minima plus 60 m (200 ft)/1,000m(3300 ft)
Non-Precision Approach	The lower of non-precision approach minima plus 60m (200 ft)/ 1,000m (3300 ft) or circling minima.	The higher of non-precision approach minima plus 60m (200 ft)/1,000m (3300 ft) or circling minima
Circling Approach	Circling Minima	Circling Minima

Note : Runways on the same aerodrome are considered to be separate runways when they are separate landing surfaces which may overlay or cross such that if one of the runways is blocked, it will not prevent the planned type of operations on the other runway and each of the landing surfaces has a separate approach based on a separate aid.

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8.6.2.8. Offshore Alternates for Helicopter Operations (AOC)

(a) No person may designate an offshore alternate landing site—

(1) when it is possible to carry enough fuel to have an on-shore alternate landing site, or

(2) when the environment around the offshore alternate is hostile.

Note : The selection of offshore alternates should be exceptional cases, the details of which have been approved by the Authority, and should not include payload enhancement in IMC.

(b) Each person selecting an off-shore alternate landing site shall consider the following :

(1) Until the point of no return, using an on-shore alternate. The offshore alternate may be used only after a point of no return.

(2) Attaining one engine inoperative performance capability before arrival at the alternate.

(3) Guaranteeing helideck availability.

(4) The meteorological information at the helideck shall be available from a source approved by the Authority.

(5) For IFR operations, an instrument approach procedure shall be prescribed and available.

(6) Attaining mechanical reliability of critical control systems and critical components when determining the suitability of the alternate.

Note : The landing technique specified in the flight manual following control system failure may preclude the selection of certain helidecks as alternate aerodromes. The mechanical reliability of critical control systems shall be taken into account when determining the suitability and necessity for an offshore alternate.

8.6.2.9. Takeoff Alternate Aerodromes-commercial Air Transport Operations

(a) No person may release or takeoff an aeroplane without a suitable takeoff alternate specified in the flight plan if either—

(1) it would not be possible to return to the aerodrome of departure, or

(2) meteorological conditions at the aerodrome of departure are below the operator's established aerodrome landing minima for that operation.

(b) Each operator shall ensure that each takeoff alternate specified shall be located within the following flight time from the aerodrome of departure—

(1) For two-engine aeroplane, one hour 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

(2) For three or more - engine aeroplane, two hours flight time at an all engine operating cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass ; or

(3) For aeroplanes engaged in extended diversion time operations where an alternate aerodrome meeting the distance criteria of (b)(1) or (2) above is not available, the first available alternate aerodrome located within the distance of the operator's approved cat considering the actual take-off mass.

(4) A take-off alternate heliport shall be selected and specified in the operational flight plan if the weather conditions at the heliport of departure are at or below the applicable heliport operating minima.

(c) The ceiling and visibility requirements for operations conducted in accordance with paragraphs (a) and (b) may be reduced upon approval of the Authority for—

(1) Commercial air transport where the Authority has approved alternate minima as an equivalent level of safety based on the results of a specific safety risk assessment demonstrated by the operator, which contains the following :

- (i) Capabilities of the operator ;
- (ii) Overall capability of the aeroplane and its systems ;
- (iii) Available aerodrome technologies, capabilities and infrastructure ;
- (iv) Quality and reliability of meteorological information ;
- (v) Identified hazards and safety risks associated with each alternate aerodrome variation ;
- (vi) Specific mitigation measures.

Note : ICAO Doc 9859, Safety Management Manual, and ICAO Doc 9976, Flight Planning and Fuel Management Manual, contain guidance on performing a safety risk assessment and on determining variations, including examples of variations.

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8.6.2.10. Maximum Distance from an Adequate Aerodrome for Aeroplanes Without an EDTO approval-(AOC).

(a) Unless specifically approved by the Authority (EDTO Approval), an AOC holder shall not operate a an aeroplane with two engines or more over a route which contains a point further from an adequate aerodrome than, in the case of—

(1) Turbine-powered aeroplanes the distance flown in 60 minutes at the one-engine-inoperative cruise speed determined in accordance with paragraph (b).

(2) Piston-engined aeroplanes :

(i) The distance flown in 120 minutes at the one-engine-inoperative cruise speed determined in accordance with paragraph (b) ; or

(ii) 555 km (300 nautical miles), whichever is less.

(b) An AOC holder shall determine a speed for the calculation of the maximum distance to an adequate aerodrome for each aeroplane with two or more engines operated, not exceeding V_{mo} based upon the true airspeed that the aeroplane can maintain with one engine inoperative under the following conditions :

(1) International Standard Atmosphere ;

(2) Level flight :

(i) For turbine-powered aeroplanes at :

(A) FL 170 ; or

(B) 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 AFM, whichever is less.

(ii) For piston-powered aeroplanes

(A) FL 80 ; or

(B) 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 AFM, whichever is less.

(3) Maximum continuous thrust or power on the remaining operating engine ;

(4) An aeroplane mass not less than that resulting from :

(i) 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 paragraph (a) ;

(ii) 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 subparagraph (a) ; and

(iii) 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 paragraph (a).

(c) An AOC holder shall ensure that the following data, specific to each type or variant, is included in the Operations Manual :

(1) The one-engine-inoperative cruise speed determined in accordance with paragraph (b) ; and

(2) The maximum distance from an adequate aerodrome determined in accordance with paragraphs (a) and (b).

Note : The speeds and altitudes (flight levels) specified above are only intended to be used for establishing the maximum distance from an adequate aerodrome.

8.6.2.11. Requirements for Extended Diversion Time Operations- Aeroplanes (AOC).

(a) An AOC holder shall not conduct operations beyond the threshold distance determined in accordance with Subsection 8.6.2.10 unless approved to do so by the Authority.

(b) In requesting EDTO approval, each AOC holder shall show to the satisfaction of the Authority that :

(1) For aeroplanes :

(i) For all aeroplanes,

(A) 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

(B) the additional fuel required by Subsection 8.6.2.15 shall include the fuel necessary to comply with the EDTO critical fuel scenario as established by the Authority.

(ii) For aeroplanes with two turbine engines, the aeroplane is EDTO certified and has verified the—

(A) Reliability of the propulsion system ;

(B) Airworthiness certification for EDTO of the aeroplane type ;
and

(C) EDTO maintenance programme.

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(2) It has conducted a safety risk assessment which demonstrates how an equivalent level of safety will be maintained, taking into account the following :

- (i) Capabilities of the operator ;
- (ii) Overall reliability of the aeroplane ;
- (iii) Reliability of each time limited system ;
- (iv) Relevant information from the aeroplane manufacturer ; and
- (v) Specific mitigation measures.

(c) Before conducting an 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 MEL generated serviceability status of the aeroplane whichever is shorter.

(d) No AOC holder shall commence a flight unless, during the possible period of arrival, the required en-route alternate aerodrome will be available and the available information indicates that conditions at the aerodrome will be at or above the aerodrome operating minima approved for the operation.

(e) No AOC holder shall conduct operations beyond 60 minutes, from a point on a route to an en-route alternate aerodrome unless it ensures that :

(1) For all aeroplanes ;

- (i) En-route alternate aerodromes are identified ; and
- (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 ;

(2) 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.

(3) these requirements are incorporated into the operators :

- (i) operational control and flight dispatch procedures ;
- (ii) operating procedures ; and
- (iii) training programmes.

(f) No AOC Holder shall proceed beyond the threshold time approved by the Authority unless :

(1) the identified en-route alternate aerodromes have been re-evaluated for availability ; and

(2) 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 that operation ; or.

(3) conditions are identified that would preclude a safe approach and landing at that aerodrome during the estimated time of use and an alternative course of action has been determined.

Note 1 : ICAO Annex 6, Part I, Attachment D contains guidance on the requirements of this provision.

Note 2 : FAA AC 120-42B (as amended), Extended Operations (ETOPS and Polar Operations), provides additional guidance.

8.6.2.12. En Route Alternate Aerodromes-EDTO Operations (AOC)

(a) The PIC shall ensure that the required en route alternates for EDTO are selected and specified in ATC flight plans in accordance with the EDTO diversion time approved by the Authority.

(b) No person shall select an aerodrome as an EDTO en-route alternate aerodrome unless the appropriate weather reports or forecasts, or any combination thereof, indicate that during a period commencing 1 hour before and ending 1 hour after the expected time of arrival at the aerodrome, the weather conditions will be at or above the planning minima prescribed in the table below, and in accordance with the operator's EDTO approval.

(c) The ceiling and visibility requirements for operations conducted in accordance with paragraphs (a) and (b) may be reduced upon approval of the Authority for—

(d) Commercial air transport where the Authority has approved alternate minima as an equivalent level of safety based on the results of a specific safety risk assessment demonstrated by the operator, which contains the following :

- (i) Capabilities of the operator ;
- (ii) Overall capability of the aeroplane and its systems ;
- (iii) Available aerodrome technologies, capabilities and infrastructure ;
- (iv) Quality and reliability of meteorological information ;
- (v) Identified hazards and safety risks associated with each alternate aerodrome variation ;
- (vi) Specific mitigation measures.

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8.6.2.13. Fuel, Oil, and Oxygen Planning and Contingency Factors.

(a) No person may commence a flight unless he or she takes into account the fuel, oil, and oxygen needed to ensure the safe completion of the flight, including any reserves to be carried for contingencies.

(b) For aeroplanes in AOC operations, the amount of usable fuel to be carried shall, as a minimum, be based on :

(1) The following data—

(i) Current aeroplane-specific data derived from a fuel consumption monitoring system, if available ; or

(ii) If current aeroplane-specific data are not available, data provided by the aeroplane manufacturer, and

(2) The operating conditions for the planned flight including :

(i) Anticipated aeroplane mass ;

(ii) Notices to Airmen ;

(iii) Current meteorological reports or a combination of current reports and forecasts ;

(iv) ATC procedures, restrictions and anticipated delays ; and

(v) The effects of deferred maintenance items and/or configuration deviations.

(vi) Any other conditions that may delay the landing of the aeroplane or increase fuel, oil and/or oxygen consumption.

(c) For helicopters, each person computing the required minimum fuel and oil supply shall ensure that additional fuel and oil are carried to provide for the increased consumption that would result from any additional operating conditions in (b)(2) as applied to helicopters, and any of the following contingencies :

(1) Expected winds or other meteorological conditions ;

(2) Possible variations in ATC routings

(3) Anticipated traffic delays ;

(4) A complete instrument approach procedure and possible missed approach at destination ;

(5) Loss of pressurization en route, if applicable ;

(6) Loss of one power-unit en route ; and

(7) Any other conditions that may delay the landing of the helicopter or increase fuel, oil and/or oxygen (if applicable) consumption.

(d) (AAC) In-flight fuel management. The PIC shall—

(1) Continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome/heliport where a safe landing can be made with the planned final reserve fuel remaining upon landing.

(2) Request delay information from ATC when unanticipated circumstances may result in landing at the destination aerodrome/heliport 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/heliport.

(3) 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/heliport may result in landing with less than planned final reserve fuel.

(4) Declare a situation of fuel emergency by broadcasting **Mayday Mayday Mayday Fuel**, when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome/heliport where a safe landing can be made is less than the planned final reserve fuel.

8.6.2.14. Minimum Fuel Supply for VFR Flights

(a) (AAC) Aeroplane. No person may commence a flight in an aeroplane under VFR unless, considering the wind and forecast weather conditions, there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed—

(1) For flights during the day, for at least 30 minutes thereafter ;

(2) For flights during the night, for at least 45 minutes thereafter, and

(b) (AAC) Helicopter. No person may commence a flight in a helicopter under VFR unless, considering the wind and forecast weather conditions, there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed—

(1) For 20 minutes thereafter ; and

(2) 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 Authority.

8.6.2.15. Minimum Fuel Supply for IFR Flights

(a) (AAC) Aeroplanes. No person may commence a flight under IFR unless there is enough fuel supply, considering meteorological conditions and any delays that are expected in flight, to—

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(1) When a destination alternate aerodrome is required, fly from the aerodrome of intended landing to an alternate aerodrome, and after that, for at least 45 minutes at normal cruising altitude ;

(2) When a destination alternate aerodrome is not required, fly to the aerodrome of intended landing and after that for at least 45 minutes at normal cruising altitude.

(b) (AOC) Aeroplanes. No person may commence a flight under IFR, or continue past the point of in-flight re-planning, unless there is enough fuel supply, considering meteorological conditions and any delays that are expected in flight, to include the following :

(1) Taxi fuel-which shall be the amount of fuel expected to be consumed before take-off ;

(2) Trip fuel-which shall be the amount of fuel required to enable the aeroplane to fly from take-off, or the point of in-flight re-planning, until landing at the destination aerodrome taking into account the operating conditions in the data provided by the manufacturer ;

(3) Contingency fuel - which shall be the amount of fuel required to compensate for unforeseen factors. It shall be five percent 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 (1500 ft) above the destination aerodrome in standard conditions ;

(4) Destination alternate fuel-which shall be :

(i) Where a destination alternate aerodrome is required, the amount of fuel required to enable the aeroplane to :

(A) Perform a missed approach at the destination aerodrome ;

(B) Climb to the expected cruising altitude ;

(C) Fly the expected routing ;

(D) Descend to the point where the expected approach is initiated ;

and

(E) Conduct the approach and landing at the destination alternate aerodrome ; or

(ii) Where two destination alternate aerodromes are required, the amount of fuel, as calculated in (4)(i) above, required to enable the aeroplane to proceed to the destination alternate aerodrome which requires the greater amount of alternate fuel ; or

(iii) 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 (1500 ft) above destination aerodrome elevation in standard conditions; or

(iv) Where the aerodrome of intended landing is an isolated aerodrome :

(A) For a reciprocating engine aeroplane, the amount of fuel required to fly for 45 minutes plus 15 percent of the flight time planned to be spend at cruising level, including final reserve fuel, or two hours, whichever is less ; or

(B) For a turbine-engined aeroplane, the amount of fuel required to fly for two hours at normal cruise consumption above the destination aerodrome, including final reserve fuel ;

(5) 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, or a pre-calculated value for each aeroplane type and variant in the fleet rounded up to an easily recalled figure :

(i) 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

(ii) For a turbine-engined aeroplane, the amount of fuel required to fly for 30 minutes at holding speed at 450 m (1500 ft) above aerodrome elevation in standard conditions ;

(6) Additional fuel-which shall be the supplementary amount of fuel required if the minimum fuel calculated in accordance with trip fuel, contingency fuel, destination alternate fuel and final reserve fuel above is not sufficient to :

(i) Allow the aeroplane to descend as necessary and proceed to an alternate aerodrome in the event of engine failure or loss or 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 ;

(A) To fly for 15 minutes at holding speed at 450 m (1500 ft) above the aerodrome elevation in standard conditions ; and

(B) Make an approach and landing ;

(C) Allow an aeroplane engaged in EDTO to comply with the EDTO critical fuel scenario as established by the Authority ;

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(D) Meet additional requirements not covered above.

Note : Fuel planning for a failure that occurs at the most critical point along a route may place the aeroplane in a fuel emergency situation.

(7) Discretionary fuel—shall be the extra amount of fuel to be carried at the discretion of the PIC, or

(8) Notwithstanding the provisions in (1)-(7) above, the Authority may approve a variation to these requirements provided the operator can demonstrate an equivalent level of safety will be maintained through a safety risk assessment that includes at least the following :

(i) Flight fuel calculations ;

(ii) Capabilities of the operator to include :

(A) A data-driven method that includes a fuel consumption monitoring programme ; and/or

(B) The advanced use of alternate aerodromes ; and

(iii) Specific mitigation measures.

(c) (AAC) and (AOC) Helicopters. No person may commence a flight under IFR unless there is enough fuel supply, considering meteorological conditions and any delays that are expected in flight, to—

(1) When a destination alternate is required,

(i) Fly to and execute an approach, and a missed approach, at the heliport to which the flight is planned, and thereafter

(ii) fly for 30 minutes at a holding speed at 450 m (1500 ft) above the alternate under standard temperature conditions, and approach and land ; and

(iii) have a reserve for contingencies specified by the operator and approved by the Authority.

(2) When a destination alternate is not required, to fly to the heliport to which the flight is planned and thereafter :

(3) fly for 30 minutes at a holding speed at 450 m (1500 ft) above the alternate under standard temperature conditions, and approach and land ; and

(4) have a reserve for contingencies specified by the operator and approved by the Authority.

8.6.2.16. Flight Planning Document Distribution and Retention-Commercial Air Transport

(a) For commercial air transport operations, the PIC shall complete and sign the following flight preparation documents before departure :

(1) An operational flight plan, including NOTAMs and weather pertinent to the flight planning decisions regarding minimum fuel supply, en route performance, and destination and alternate aerodromes

(2) A load manifest, showing the distribution of the load, centre of gravity, takeoff and landing mass and compliance with maximum operating mass limitations, and performance analysis.

(3) An applicable technical log page, if mechanical irregularities were entered after a previous flight, maintenance or inspection functions were performed or a maintenance release was issued at the departure aerodrome.

(b) No person may takeoff an aircraft in commercial air transport unless all flight release documents, signed by the PIC, are retained and available at the point of departure.

(c) The PIC shall carry a copy of the documents specified in paragraph (a) on the aircraft to the destination aerodrome.

(d) Completed flight preparation documents shall be kept by the AOC holder for a period of three months.

Note : The Authority may approve a different retention location where all documents can be available for subsequent review.

8.6.2.17. Aircraft Loading, Mass and Balance.

(a) No person may operate an aircraft unless all loads carried are properly distributed and safely secured.

(b) No person may operate an aircraft unless the calculations for the mass of the aeroplane and centre of gravity location indicate that the flight can be conducted safely, taking into account the flight conditions expected.

Note : When load masters, load planners or other qualified personnel are provided by the AOC holder in a commercial air transport operation, the PIC may delegate these responsibilities, but shall ascertain that proper loading procedures are followed.

(c) For commercial air transport operations, no PIC may commence a flight unless the PIC is satisfied that the loading and mass and balance calculations contained in the load manifest are accurate and comply with the aircraft limitations.

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8.6.2.18. Maximum Allowable Mass to be Considered on all Load Manifests

(a) The PIC shall ensure that the maximum allowable mass for a flight does not exceed the maximum allowable takeoff mass—

(1) For the specific runway and conditions existing at the takeoff time ;
and

(2) Considering anticipated fuel and oil consumption that allows compliance with applicable en route performance, landing mass, and landing distance limitations for destination and alternate aerodromes.

8.6.2.19. Flight Release Required-Commercial Air Transport

(a) No person may start a flight under a flight following system without specific authority from the person authorised by the AOC holder to exercise operational control over the flight.

(b) No person may commence a passenger-carrying flight in commercial air transport unless a qualified person authorised by the AOC holder to perform operational control functions has issued a flight release for that specific operation or series of operations.

8.6.2.20. Operational Flight Plan-commercial Air Transport.

(a) No person may commence a flight unless the operational flight plan has been signed by the PIC.

(b) A PIC may sign the operational flight plan only when the PIC and the person authorised by the operator to exercise operational control have determined that the flight can be safely completed.

(c) *Note* : The operational flight plan shall include the routing and fuel calculations, with respect to the meteorological and other factors expected, to complete the flight to the destination and all required alternates.

(d) The PIC signing the operational flight plan shall have access to the applicable flight planning information for fuel supply, alternate aerodromes, weather reports and forecasts and NOTAMs for the routing and aerodrome.

(e) No person may continue a flight from an intermediate aerodrome without a new operational flight plan if the aircraft has been on the ground more than 6 hours.

8.7. AIRCRAFT OPERATING AND PERFORMANCE LIMITATIONS**8.7.1. All Aircraft.**

8.7.1.1.—(a) This Section prescribes the operating and performance limitations for all civil aircraft. Applicability.

8.7.1.2.—(a) No person may operate an aircraft that— General.

(1) Exceeds its designed performance limitations for any operation, as established by the State of Registry ;

(2) Exceeds the operating limitations contained in the aircraft flight manual, or its equivalent ;

(3) Exceeds the terms of its certificate of airworthiness ; or

(4) Exceeds the mass limitations, if applicable, imposed by the terms of its noise certification standards, as contained in the applicable part of ICAO *Annex 16*, Volume I, unless otherwise approved by the Authority.

8.7.1.3. Aircraft Performance Calculations

(a) Each operator shall ensure that the performance data contained in the AFM, RFM, or other authorised source is used to determine compliance with the appropriate requirements of Subpart 8.7.

(b) When applying performance data, each person performing calculations shall account for all factors that significantly affect the performance of the aircraft configuration, including, but not limited to: 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 i.e., environmental conditions, snow, slush, water, ice, for landplanes, water surface condition for seaplanes, and the operation of any system or systems that may have an adverse effect on performance.

(c) The factors described in subpart (b) of the aircraft performance calculations shall be taken into account directly as operations parameters or indirectly by means of allowances or margins, which may be provided in the design performance limits or in the terms of the AOC in accordance with which the aeroplane is being operated.

8.7.1.4. General Mass and Obstruction Clearance Limitations

(a) No person may takeoff an aircraft without ensuring that the maximum allowable mass for a flight does not exceed the maximum allowable takeoff or landing mass, or any applicable en route performance or landing distance limitations considering the—

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- (1) Condition of the takeoff and landing areas to be used ;
- (2) Gradient of runway to be used (landplanes only) ;
- (3) Pressure altitude ;
- (4) Ambient temperature ;
- (5) Current and forecast winds ; and

(6) Any known conditions (e.g., atmospheric and aircraft configuration) which may adversely affect aircraft performance, or compliance with noise certification standards if required.

(b) No person may takeoff an aircraft at a mass that, assuming normal engine operation, cannot safely clear all obstacles during all phases of flight, including all points along the intended en route path or any planned diversions.

8.7.2. AIRCRAFT USED IN COMMERCIAL AIR TRANSPORT

8.7.2.1. Applicability.

(a) This Section prescribes aircraft performance and operating limitations for aircraft used in commercial air transport operations, except for those used by air transport operators holding a special authorization or waiver granted by the Authority, that exempts the aircraft from specific operating and performance limitations.

8.7.2.2. General.

(a) Each person operating an aircraft engaged in commercial air transport shall comply with the provisions of Section 8.7.2.

(b) Each person operating a rotorcraft identified as Class 1, 2, or 3 in international commercial air transport shall comply with the code of performance in IS : 8.7.2.2(b).

(c) The Authority may grant exemptions in accordance with Part 1 of these regulations, from the requirements of Section 8.7.2 if special circumstances make a literal observance of a requirement unnecessary for safety.

(d) Where full compliance with the requirements of Section 8.7.2 cannot be shown due to specific design characteristics (e.g., seaplanes, airships, or supersonic aircraft), the operator shall apply approved performance standards that ensure a level of safety not less restrictive than those of relevant requirements of this Section.

(e) No person may operate a single-engine aircraft or an aircraft type certificated for operation by a single-pilot used for revenue passenger carrying operations unless that aircraft is continually operated in daylight, VFR, excluding over the top, and over routes and diversions there that do not permit a safe forced landing to be executed in the event of an engine failure.

(1) Notwithstanding Subsection 8.7.2.2(e), the Authority may approve single-pilot operations in propeller driven, turbine powered aircraft under IFR, at night, or under IMC for aircraft certificated for a maximum take-off weight of 5,700 kg (12566 lb) or less and a maximum approved passenger seating configuration of 9 or less, provided it meets the equipment requirements of Part 7.

(2) Notwithstanding Subsection 8.7.2.2(e)(1), the Authority may approve single-pilot operations in propeller driven, turbine powered aircraft under IFR at night, or under IMC for aircraft certificated maximum take-off weight of 5,700 kg (12566 lb) or less with a passenger seating configuration of more than 9 passengers if the aircraft is type certificated for operations by a single pilot, provided it meets the equipment requirements of Part 7 and the Authority has authorised an exemption from Subsection 8.7.2.2(e)(1) in the operators operations specifications. If such operations are to be conducted outside Nigeria, the Nigeria shall have an arrangement with the States where operations will be conducted.

(f) No person may operate a multiengine aircraft used for revenue passengers carrying operations that is unable to comply with any of the performance limitations of Subsections 8.7.2.5 through 8.7.2.9 unless that aircraft is continually operated—

(1) In daylight ;

(2) In VFR, excluding over the top operations ; and

(3) At a mass that will allow it to climb, with the critical engine inoperative, at least 15 m (50ft) a minute when operating at the MEAs of the intended route or any planned diversion, or at 1500 m (5,000 ft) MSL, whichever is higher.

(g) Multiengine aircraft that are unable to comply with paragraph (e)(3) are, for the purpose of this Section, considered to be a single engine aircraft and shall comply with the requirements of paragraph (d).

8.7.2.3. Single and Multi-Engine Aeroplane Operations

(a) No person may operate a single-engine aircraft in revenue passenger carrying operations unless that aircraft is continually operated in daylight, VFR over such routes and diversions there from that permit a safe forced landing to be executed in the event of an engine failure.

(1) Notwithstanding Subsection 8.7.2.3 (a), the Authority may approve single-engine operations in propeller driven, turbine powered aircraft under IFR, at night, or under IMC for aircraft certificated for a maximum take-off weight of 5,700 kg or less and a maximum approved passenger seating configuration of 9 or less, provided it meets the equipment requirements of Part 7.

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(2) Notwithstanding Subsection 8.7.2.3 (a)(1), the Authority may approve single-engine operations in propeller driven, turbine powered aircraft under IFR at night, or under IMC for aircraft certificated maximum take-off weight of 5,700 kg or less with a passenger seating configuration of more than 9 passengers if the aircraft is type certificated for operations by a single pilot, provided it meets the equipment requirements of Part 7 and the Authority has authorised an exemption from Subsection 8.7.2.3 (a)(1), in the operators operations specifications. If such operations are to be conducted outside Nigeria, the Nigeria shall have an arrangement with the States where operations will be conducted.

(b) No person shall operate single-engine turbine-powered aeroplanes at night and/or in IMC unless the airworthiness certification of the aeroplane is appropriate and acceptable to the Authority and that the overall safety of the operation is consistent with commercial air transportation operations as provided by :

- (1) The reliability of the turbine engine ;
- (2) The operator's maintenance procedures, operating practices, flight dispatch procedures ;
- (3) Crew training programmes ; and
- (4) Equipment and additional requirements provided in accordance with paragraph (d)

(c) No person shall operate a single-engine turbine-powered aeroplane at night and/or in IMC unless the aeroplane has 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.

(d) IS : 8.7.2.3 provides additional airworthiness and operational requirements applicable to the operation of single-engine turbine-powered aeroplanes at night and/or in IMC with respect to :

- (1) Turbine engine reliability ;
- (2) Systems and equipment ;
- (3) Minimum equipment list ;
- (4) Flight manual information ;
- (5) Event reporting ;
- (6) Operator planning ;
- (7) Flight crew experience, training and checking ;

(8) Route limitations over water ;

(9) Operator certification or validation.

(e) No person may operate a multiengine aircraft used for revenue passengers carrying operations that is unable to comply with any of the performance limitations of Subsections 8.7.2.4 through 8.7.2.8 unless that aircraft is continually operated—

(1) In daylight ;

(2) In VFR, excluding over the top operations ; and

(3) At a mass that will allow it to climb, with the critical engine inoperative, at least 15 m (50 ft) a minute when operating at the MEAs of the intended route or any planned diversion, or at 1500 m (5000 ft) MSL, whichever is higher.

(f) Multiengine aircraft that are unable to comply with paragraph (e) (3) are, for the purpose of this Section, considered to be a single engine aircraft and shall comply with the requirements of paragraph (a).

8.7.2.4. Aircraft Performance Calculations

(a) No person may takeoff an aircraft used in commercial air transport without ensuring that the applicable operating and performance limitations required for this section can be accurately computed based on the AFM, RFM, or other data source approved by the Authority.

(b) Each person calculating performance and operating limitations for aircraft used in commercial air transport shall ensure that performance data used to determine compliance with this section can, during any phase of flight, accurately account for—

(1) Any reasonably expected adverse operating conditions that may affect aircraft performance ;

(2) One engine failure for aircraft having two engines, if applicable ; and

(3) Two engine failure for aircraft having three or more engines, if applicable.

(c) When calculating the performance and limitation requirements of Subsections 8.7.2.5 to 8.7.2.9, each person performing the calculation shall, for all engines operating and for inoperative engines, accurately account for—

(1) In all phases of flight—

(i) The effect of fuel and oil consumption on aircraft mass ;

(ii) The effect of fuel consumption on fuel reserves resulting from changes in flight paths, winds, and aircraft configuration ;

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(iii) The effect of fuel jettisoning on aircraft mass and fuel reserves, if applicable and approved ;

(iv) The effect of any ice protection system, if applicable and weather conditions require its use ;

(v) Ambient temperatures and winds along intended route and any planned diversion ;

(vi) Flight paths and minimum altitudes required to remain clear of obstacles.

(2) During take off and landing—

(d) The condition of the takeoff runway or area to be used, including any contaminants (e.g., water, slush, snow, ice) ;

(1) The gradient of runway to be used ;

(2) The runway length including clearways and stopways, if applicable ;

(3) Pressure altitudes at takeoff and landing sites ;

(4) Current ambient temperatures and winds at takeoff ;

(5) Forecast ambient temperatures and winds at each destination and planned alternate landing site;

(6) The ground handling characteristics (e.g., braking action) of the type of aircraft ; and

(7) Landing aids and terrain that may affect the takeoff path, landing path, and landing roll.

Note 1: Where conditions are different from those on which the performance is based, compliance may be determined by interpolation or by computing the effects of changes in the specific variables, if the results of the interpolation or computations are substantially as accurate as the results of direct tests.

Note 2: To allow for wind effect, takeoff and landing data based on still air may be corrected by taking into account not more than 50 percent of any reported headwind component and not less than 150 percent of any reported tailwind component.

8.7.2.5. Take off Limitations.

(a) Aeroplanes. No person may takeoff an aeroplane used in commercial air transport unless the following requirements are met when determining the maximum permitted take-off mass :

(1) The takeoff run shall not be greater than the length of the runway.

(2) For turbine- powered aeroplanes—

(i) The takeoff distance shall not exceed the length of the runway plus the length of any clearway, except that the length of any clearway included in the calculation shall not be greater than 1/2 the length of the runway; and

(ii) The accelerate-stop distance shall not exceed the length of the runway, plus the length of any stop way, at any time during takeoff until reaching V1.

(3) For piston-engined aeroplanes—

(i) The accelerate-stop distance shall not exceed the length of the runway at any time during takeoff until reaching V1.

(4) If the critical engine fails at any time after the aeroplane reaches V1, to continue the takeoff flight path and clear all obstacles either—

(i) By a height of at least 9 m (35 ft) vertically for turbine-powered aeroplanes or 15 m (50 ft) for piston-engined aeroplanes ; and

(ii) By at least 60 m (200 ft) horizontally within the aerodrome boundaries and by at least 90 m (300 ft) horizontally after passing the boundaries, without banking more than 15 degrees at any point on the takeoff flight path.

(b) Helicopters. No person may takeoff a helicopter used in commercial air transport that, in the event of a critical engine failure, cannot—

(1) For Class 1 helicopters—

(i) At or before the takeoff decision point, discontinue the takeoff and stop within the rejected takeoff area ; or

(ii) After the takeoff decision point, continue the takeoff and then climb, clearing all obstacles along the flight path, until a suitable landing site is found.

(2) For Class 2 helicopters—

(i) Before reaching a defined point after take-off, safely execute a forced landing within the rejected takeoff area, or

(ii) At any point after reaching a defined point after take-off, continue the takeoff and then climb, clearing all obstacles along the flight path, until a suitable landing site is found.

(3) For Class 3 helicopters—

(i) Clear the obstacles along its flight path by an adequate margin ; or

(ii) Maintain minimum flight altitude ; or

(iii) At engine failure permit a safe, forced landing.

(c) Where helicopters are operating to or from heliports in a congested hostile environment, the competent authority of the State in which the heliport is situated shall take such precautions as are necessary to control the risk associated with an engine failure.

8.7.2.6. En Route Limitations-Aeroplane-all Engines Operating.

(a) No person may take off a piston-engined aeroplane used in commercial air transport at a mass that does not allow a rate of climb of at least 6.9 V_{so} , (that is, the number of feet per minute obtained by multiplying the aeroplane's minimum steady flight speed by 6.9) with all engines operating, at an altitude of at least 300 m (1000 ft) above all terrain and obstructions within ten miles of each side of the intended track.

8.7.2.7. En Route Limitations-one Engine Inoperative.

(a) *Aeroplane.* No person may take off an aeroplane used in commercial air transport having two engines unless that aeroplane can, in the event of a power failure at the most critical point en route, continue the flight to a suitable aerodrome where a landing can be made while allowing—

(1) For piston-engined aeroplanes—

(i) At least a rate of climb of $0.079 - (0.106/\text{number of engines installed}) V_{so2}$ (when V_{so} is expressed in knots) at an altitude of 300 m (1000 ft) above all terrain and obstructions within 9.3 km (5 nautical miles), on each side of the intended track ; and

(ii) A positive slope at an altitude of at least 450 m (1500 ft) above the aerodrome where the aeroplane is assumed to land.

(2) For turbine-powered transport category aeroplanes—

(i) A positive slope at an altitude of at least 300 m (1000 ft) above all terrain and obstructions within 9.3 km (5 nautical miles), on each side of the intended track ;

(ii) A net flight path from cruising altitude to the intended landing aerodrome that allows at least 600 m (2000 ft) clearance above all terrain and obstructions within 9.3 km (5 nautical miles), on each side of the intended track ; and

(iii) A positive slope at an altitude of at least 450 m (1500 ft) above the aerodrome where the aeroplane is assumed to land ;

Note : The climb rate specified in paragraph (a)(1)(i) may be amended to $0.026 V_{so2}$ for large transport category aircraft issued a type certificate before 1953.

Note : The 9.3 km (5 nautical miles) clearance margin stated in paragraph (a) shall be increased to 18.5 km (10 nautical miles) if navigational accuracy does not meet the 95% containment level.

(b) Helicopter. No person shall take off a helicopter used in commercial air transport having two engines unless that helicopter can, in the event of the critical engine failing at any point in the en route phase, continue the flight to the destination or alternate landing site without flying below the minimum flight altitude at any point and clearing all obstacles in the approach path by a safe margin.

8.7.2.8. En Route Limitations-two Engines Inoperative.

(a) Aeroplane. No person may takeoff an aeroplane used in commercial air transport having three or more engines at such a mass 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 aeroplane 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 allowing—

(1) For turbine-powered aeroplanes—

(i) A net flight path (considering the ambient temperatures anticipated along the track) clearing vertically by at least 600 m (2000 ft) all terrain and obstructions within 9.3 km (five nautical miles) on each side of the intended track ;

(ii) A positive slope at 450 m (1500 ft) above the aerodrome of intended landing ; and

(iii) Enough fuel to continue to the aerodrome of intended landing, to arrive at an altitude of at least 450 m (1500 ft) directly over the aerodrome, and thereafter to fly for 15 minutes at cruise power.

Note : The consumption of fuel and oil after the engine failure is the same as the consumption that is allowed for in the net flight path data in the AFM.

(2) For piston-engined aeroplanes—

(i) A rate of climb at $0.013 V_{so2}$ feet per minute (that is, the number of feet per minute is obtained by multiplying the number of knots squared by 0.013) at an altitude of 300m (1000 ft) above the highest ground or obstruction within 18.6 km (10 nautical miles) on each side of the intended track, or at an altitude of 1500 m (5000 ft), whichever is higher ; and

(ii) Enough fuel to continue to the aerodrome of intended landing and to arrive at an altitude of at least 300 m (1000 ft) directly over that aerodrome.

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Note 1 : When the two engines of the piston-engined aeroplane are predicted to fail at an altitude above the prescribed minimum altitude, compliance with the prescribed rate of climb need not be shown during the descent from the cruising altitude to the prescribed minimum altitude, if those requirements can be met once the prescribed minimum altitude is reached, and assuming descent to be along a net flight path and the rate of descent to be 0.013 V_{so2} greater than the rate in the approved performance data.

Note 2 : If fuel jettisoning is authorised (or planned), the aeroplane's mass at the point where the two engines fail is considered to be not less than that which would include enough fuel to proceed to an aerodrome and to arrive at an altitude of at least 300 m (1000 ft) directly over that aerodrome.

(b) Helicopters. No person shall takeoff a Class 1 or Class 2 helicopter used in commercial air transport having three or more engines unless that helicopter can, in the event of two critical engines failing simultaneously at any point in the en route phase, continue the flight to a suitable landing site.

8.7.2.9. Landing Limitations.

(a) Aeroplane. No person may take off an aeroplane used in commercial operations unless its mass on arrival at either the intended destination aerodrome or any planned alternate aerodrome would allow a full stop landing from a point 15 m (50 ft) above the intersection of the obstruction clearance plane and the runway, and within—

(1) For turbine-powered aeroplanes, 60 percent of the effective length of each runway.

(2) For piston-engined aeroplanes, 70 percent of the effective length of each runway.

(b) For the purpose of determining the allowable landing mass at the destination aerodrome, each person determining the landing limit shall ensure that—

(1) The aeroplane is landed on the most favourable runway and in the most favourable direction, in still air ; or

(2) The aeroplane is landed on the most suitable runway considering the probable wind velocity and direction, runway conditions, the ground handling characteristics of the aeroplane, and considering other conditions such as landing aids and terrain.

Note : If the runway at the landing destination is reported or forecast to be wet or slippery, the landing distance available shall be at least 115 percent of the required landing distance unless, based on a showing of actual operating landing techniques on wet or slippery runways, a shorter landing distance (but not less than that required by paragraph (a) has been approved for a specific type and model aeroplane and this information is included in the AFM.

(c) A turbine-powered transport category aeroplane that would be prohibited from taking off because it could not meet the requirements of paragraph (a)(1), may take off if an alternate aerodrome is specified that meets all the requirements of paragraph (a).

(d) Helicopters. No person may take off a helicopter used in commercial air transport unless, with all engines operating on arrival at the intended destination landing site or any planned alternate landing, it can clear all obstacles on the approach path and can land and stop within the landing distance available.

(e) Helicopters. No person may take off a helicopter used in commercial air transport unless, in the event of any engine becoming inoperative in the approach and landing phase on arrival at the intended destination landing site or any planned alternate landing, it can—

(1) For Class 1 helicopters—

(i) Before the landing decision point, clear all obstacles on the approach path and be able to land and stop within the landing distance available or to perform a bailed landing and clear all obstacles in the flight path by an adequate margin ; or

(ii) After the landing decision point, land and stop within the landing distance available.

(2) For Class 2 helicopters—

(i) Before reaching a defined point before landing, safely execute a forced landing within the landing distance available.

(3) For Class 3 helicopters—

(i) Safely execute a forced landing within the landing distance available.

8.7.2.10. Additional Requirements For Class 3 Helicopters Operating In IMC

(a) Except for special VFR flights, no person may operate a performance Class 3 helicopter in IMC unless :

(1) The surface environment over which the operation is to be performed is acceptable to the Authority ;

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(2) The helicopter is certified for flight under IFR ;

(3) The operation is approved by the Authority taking into consideration the overall level of safety provided by :

(i) The reliability of the engines ;

(ii) The operator's maintenance procedures, operating practices and crew training programmes; and equipment including the operator's vibration health monitoring practices for the tail-rotor drive system.

(b) Where the State of the Operator permits IMC operations in performance Class 3, such operations shall be conducted in accordance with the provisions of this sub-part.

(c) Except for special VFR flights, no person may operate a performance Class 3 helicopter in IMC unless the operator has an engine trend monitoring system and uses the instruments, systems and operational/maintenance procedures to monitor the engines that are recommended by the helicopter manufacture.

8.8. FLIGHT RULES

8.8.1. All Operations

8.8.1.1. Operation of Aircraft on the Ground

(a) No person may taxi an aircraft on the movement area of an aerodrome unless the person at the controls—

(1) Has been authorised by the owner, the lessee, or a designated agent ;

(2) Is fully competent to taxi the aircraft ;

(3) Is qualified to use the radio if radio communications are required ;
and

(4) Has received instruction from a competent person in respect of aerodrome layout, and where appropriate, information on routes, signs, marking, lights, ATC signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aircraft movement at the aerodrome.

(b) No person shall cause a helicopter rotor to be turned under power unless there is a qualified pilot at the controls.

(c) No person shall taxi an aircraft under the guidance of a signalman unless—

(1) The standard marshalling signals to the aircraft are provided in a clear and precise manner using the signals as prescribed by the Authority in IS : 8.8.2.11.

(2) The signalman is wearing a distinctive fluorescent identification vest to allow the flight crew to identify that he or she is the person responsible for the marshalling operation ; and

(3) The signalman and all participating ground staff are using daylight-fluorescent wands, table-tennis bats or gloves for all signaling during daylight hours and illuminated wands at night or in low visibility.

8.8.1.2. Takeoff Conditions

(a) Before commencing takeoff, a PIC shall ensure that—

(1) According to the available information, the weather at the aerodrome and the condition of the runway intended to be used will allow for a safe takeoff and departure ; and

(2) The RVR or visibility in the takeoff direction of the aircraft is equal to or better than the applicable minimum.

8.8.1.3. Flight Into Known or Expected ICING.

(a) No person may take off an aircraft or continue to operate an aircraft en route when icing conditions are expected or encountered, without ensuring that the aircraft is certified for icing operations and has sufficient operational de-icing or anti-icing equipment.

(b) No person may take off an aircraft when frost, ice or snow is adhering to the wings, control surfaces, propellers, engine inlets or other critical surfaces of the aircraft which might adversely affect the performance or controllability of the aircraft.

(c) For commercial air transport operations, no person may take off an aircraft when conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, unless the aircraft has been inspected for icing, and the procedures approved for the AOC holder by the Authority are followed to ensure ground de-icing and anti-icing is accomplished.

8.8.1.4. Altimeter Settings.

(a) Each person operating an aircraft, except a balloon or glider, shall maintain the cruising altitude or flight level by reference to an altimeter setting.

(b) The lowest usable flight level is determined by the atmospheric pressure in the area of operation.

(c) The flightcrew shall use the altimeter settings provided by the ATC service of Nigeria.

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Note : In areas of the world where it may not be possible to get an altimeter setting, reference the State's procedures in the AIP.

8.8.1.5. Minimum Safe Altitudes-general

(a) Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes :

(1) Anywhere. An altitude allowing, if a power unit fails, continuation of flight or an emergency landing without undue hazard to persons or property on the surface.

(2) Over congested areas. Over any congested area of a city, town, or settlement, or over any open-air assembly of persons, an altitude of 300 m (1000 ft) above the highest obstacle within a horizontal radius of 600 m (2000 ft) of the aircraft.

(3) Over other than congested areas. An altitude of 150 m (500 ft) above the surface, except over open water or sparsely populated areas where the aircraft may not be operated closer than 150 m (500 ft) to any person, vessel, vehicle, or structure.

(4) Helicopters. Pilots of helicopters are not subject to the proximity restrictions provided they are operated in a manner that is not hazardous to persons and property on the surface. The PIC of a helicopter shall comply with any routes or altitudes for the area that are prescribed for helicopters by the Authority.

(5) Altitudes prescribed by ICAO *Annex 2*: 3.1.2, 4.6; 5.1.2

8.8.1.6. Minimum Safe VFR Altitudes

(a) Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes :

(1) No person may operate an aeroplane during the day, under VFR, at an altitude less than 300 m (1000 ft) above the surface or within 300 m (1000 ft) of any mountain, hill, or other obstruction to flight.

(2) No person may operate an aeroplane at night, under VFR, at an altitude less than 300 m (1000 ft) above the highest obstacle within a horizontal distance of 8 km (5 statute miles) from the centre of the intended course, or, in designated mountainous areas, less than 600 m (2000 ft) above the highest obstacle within a horizontal distance of 8 km (5 statute miles) from the centre of the intended course.

8.8.1.7. Instrument Approach Operating Minima.

(a) No person may operate to or from an aerodrome using operating minima lower than those which may be established for that aerodrome by the State in which it is located, unless that State specifically approves that operation in accordance with the provisions of Implementing Standard : IS : 8.8.1.7.

(b) No person may conduct instrument approach and landing operations below 800 m (2600 ft) visibility unless RVR information is provided.

(c) The State of the Operator shall require that the operator establish heliport operating minima for each heliport to be used in operations and shall approve the method of determination of such minima. Such minima shall not be lower than any that may be established for such heliports by the State in which the heliport is located, except when specifically approved by that State.

(d) 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 :

(1) *Type A* : a minimum descent height or decision height at or above 75 m (250 ft) ; and

(2) *Type B* : a decision height below 75 m (250 ft). Type B instrument approach operations are categorized as :

(i) Category I (CAT I) : a decision height not lower than 60 m (200 ft) with either a visibility not less than 800 m or a runway visual range not less than 550 m ;

(ii) Category II (CAT II) : a decision height lower than 60 m (200 ft) but not lower than 30 m (100 ft) and a runway visual range not less than 300 m ;

(iii) Category IIIA (CAT IIIA) : a decision height lower than 30 m (100 ft) or no decision height and a runway visual range not less than 175 m ;

(iv) Category IIIB (CAT IIIB) : a decision height lower than 15m (50 ft) or no decision height and a runway visual range less than 175 m but not less than 50 m ; and,

(v) Category IIIC (CAT IIIC) : no decision height and no runway visual range limitations.

(e) 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.

(f) 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.

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Note 1 : Where DH and RVR fall into different categories of operation, the instrument approach operation would be conducted in accordance with the requirements of the most demanding category (e.g., an operation with a DH in the range of CAT IIIA but with an RVR in the range of CAT IIIB would be considered a CAT IIIB operation or an operation with a DH in the range of CAT II but with an RVR in the range of CAT I would be considered a CAT II operation).

8.8.1.8. Category II and III Operations-General Operating Rules.

(a) No person may operate a civil aircraft in a Category II or III operation unless—

(1) The PIC and CP of the aircraft hold the appropriate authorisations and ratings prescribed in Part 2.

(2) Each flight crewmember has adequate knowledge of, and familiarity with, the aircraft and the procedures to be used ; and

(3) 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.

(b) Unless otherwise authorised by the Authority, no person may operate a civil aircraft in a Category II or Category III operation unless each ground component required for that operation and the related airborne equipment is installed and operating.

(c) When the approach procedure being used provides for and requires the use of a DH, the authorised DH is the highest of the following :

(1) The DH prescribed by the approach procedure.

(2) The DH prescribed for the PIC.

(3) The DH for which the aircraft is equipped.

(d) Unless otherwise authorised by the Authority, no pilot operating an aircraft in a Category II or Category III approach that provides and requires use of a DH may continue the approach below the authorised decision height unless the following conditions are met :

(1) 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 will allow touchdown to occur within the touchdown zone of the runway of intended landing.

(2) At least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot :

(i) The approach light system, except that the pilot may not descend below 30 m (100 ft) 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.

(ii) The threshold.

(iii) The threshold markings.

(iv) The threshold lights.

(v) The touchdown zone or touchdown zone markings.

(vi) The touchdown zone lights.

(e) Unless otherwise authorised by the Authority, each pilot operating an aircraft shall immediately execute an appropriate missed approach whenever, before touchdown, the requirements of paragraph (d) of this section are not met.

(f) No person operating an aircraft using a Category III approach without DH may land that aircraft except in accordance with the provisions of the letter of authorisation issued by the Authority.

(g) No person may conduct Category II or III instrument approaches and landing operations below 800 m (2600 ft) visibility unless RVR information is provided.

(h) Paragraphs (a) through (g) of this section do not apply to operations conducted by AOC holders issued a certificate under Part 9. No person may operate a civil aircraft in a CAT II or CAT III operation conducted by an AOC holder unless the operation is conducted in accordance with that AOC holder's approved training programme and operations specifications.

Note 1 : Category II approval is required to prior to obtaining Category III approval.

8.8.1.9. Category II and Category III Manual.

(a) Except as provided in paragraph (c) of this section, no person may operate a civil aircraft in a Category II or a Category III operation unless—

(1) There is available in the aircraft a current and approved Category II or Category III Manual, as appropriate, for that aircraft ;

(2) The operation is conducted in accordance with the procedures, instructions, and limitations in the appropriate manual ; and

(3) 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.

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(b) Each operator must keep a current copy of each approved manual at its principal base of operations and must make each manual available for inspection upon request by the Authority.

(c) Paragraphs (a) and (b) do not apply to operations conducted by an AOC holder issued a certificate under Part 9, which will have approved Category II or III operations included as a part of its operations manual.

(d) IS : 8.8.1.9 provides specific Category II and III Manual requirements.

Note 1 : Category II approval is required prior to obtaining Category III approval.

8.8.1.10. Exemption From Certain Category II Operations.

(a) The Authority may grant an exemption from the requirements of Subsections 8.8.1.8 and 8.8.1.9 for the operation of small aircraft Category II operations if the operator can demonstrate to the Authority that the proposed operation can be safely conducted.

Note : Such authorisation does not permit operation of the aircraft carrying persons or property for compensation or hire.

8.8.1.11. Diversion Decision-Engine Inoperative

(a) Except as provided in paragraph (b), the PIC shall land the aircraft at the nearest suitable aerodrome at which a safe landing can be made whenever an engine of an aircraft fails or is shut down to prevent possible damage.

(b) If not more than one engine of an aeroplane having three or more engines fails, or its rotation is stopped, the PIC may proceed to an aerodrome if he or she decides that proceeding to that aerodrome is as safe as landing at the nearest suitable aerodrome after considering the—

(1) Nature of the malfunction and the possible mechanical difficulties that may occur if flight is continued ;

(2) Altitude, mass, and usable fuel at the time of engine stoppage ;

(3) Weather conditions en route and at possible landing points ;

(4) Air traffic congestion ;

(5) Kind of terrain ; and

(6) Familiarity with the aerodrome to be used

8.8.1.12. Operating Near other Aircraft-Including Formation Flights.

(a) No person may operate an aircraft so close to another aircraft as to create a collision hazard.

(b) No person may operate an aircraft in formation flight except—

(1) By arrangement with the PIC of each aircraft in the formation, and

(2) If in controlled airspace, in accordance with conditions prescribed by the appropriate air traffic authority, which includes that :

(i) The formation operates as a single aircraft with regard to navigation and position reporting ;

(ii) Separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots in command of the other aircraft in flight ;

(iii) Separation between aircraft shall include periods of transition when aircraft are maneuvering to attain their own separation within the formation and during join-up and break-away ; and

(iv) A distance not exceeding 1 km (1/2 nautical mile) laterally and longitudinally and 30 m (100 ft) vertically from the flight leader shall be maintained by each aircraft.

(c) No person may operate an aircraft, carrying passengers for hire, in formation flight.

8.8.1.13. Right-of-way Rules-except Water Operations.

(a) General.

(1) Each pilot shall maintain vigilance so as to see and avoid other aircraft ; and

(2) When a rule of this subsection gives another aircraft the right-of-way, the pilot shall give way to that aircraft and may not pass over, under, or ahead of it unless well clear and taking into account the effect of aircraft wake turbulence.

(3) Each pilot who has the right-of-way shall maintain his or her heading and speed but is still responsible for taking such action, including collision avoidance manoeuvres based on resolution advisories provided by ACAS equipment, as will best avert collision.

(b) In distress. An aircraft in distress has the right-of-way over all other air traffic.

(c) Converging.

(1) When aircraft of the same category are converging at approximately the same altitude (except head-on, or nearly so), the aircraft to the other's right has the right-of-way.

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(2) If the converging aircraft are of different categories—

(i) A balloon has the right-of-way over any other category of aircraft ;

(ii) A glider has the right-of-way over an airship, and power driven heavier than air aircraft ; and

(iii) An airship has the right-of-way over a power driven heavier than air aircraft.

(d) Towing or refueling. An aircraft towing or refueling other aircraft has the right-of-way over all other engine-driven aircraft, except aircraft in distress.

(e) Approaching head-on. When aircraft are approaching each other head-on, or nearly so, each pilot of each aircraft shall alter course to the right.

(f) Overtaking. Each aircraft that is being overtaken has the right-of-way and each pilot of an overtaking aircraft, whether climbing, descending or in horizontal flight, shall alter course to the right to pass well clear.

(g) Landing. Aircraft, while on final approach to land or while landing, have the right-of-way over other aircraft in flight or operating on the surface.

(h) More than one landing aircraft. When two or more aircraft are approaching an aerodrome for the purpose of landing, the aircraft at the lower altitude has the right-of-way.

(i) The PIC shall not take advantage of the right of way landing rules in items (g) and (h) in this paragraph to cut in front of another aircraft that is on final approach to land or to overtake that aircraft.

(j) Emergency landing. Aircraft that are compelled to land have the right-of-way over other aircraft.

(k) Taking off. Aircraft taking off have the right-of-way over aircraft taxiing on the manoeuvring area of an aerodrome.

(l) Surface movement of aircraft.

(1) Approaching head-on. When aircraft are approaching each other head-on, or approximately so, each pilot of each aircraft shall stop, or wherever practicable alter course to the right so as to keep well clear.

(2) Converging. When aircraft are converging on a course, the aircraft to the other's right has the right-of-way.

(3) Overtaking. Each aircraft that is being overtaken has the right-of-way and each pilot of an overtaking aircraft shall keep well clear.

(m) Aircraft taxiing on the manoeuvring area of an aerodrome.

(1) An aircraft taxiing on the manoeuvring area shall stop and hold at all runway-holding positions unless otherwise authorised by the aerodrome control tower.

(2) An aircraft taxiing on the manoeuvring area shall stop and hold at all lighted stop bars and may proceed further when the lights are switched off.

8.8.1.14. Right-of-way Rules-Water Operations.

(a) General. Each person operating an aircraft on the water shall, insofar as possible, keep clear of all vessels and avoid impeding their navigation, and shall give way to any vessel or other aircraft that is given the right-of-way by any rule of this subsection.

(b) Converging or Crossing. When aircraft, or an aircraft and a vessel, are on crossing courses, the aircraft or vessel to the other's right has the right-of-way.

(c) Approaching head-on. When aircraft, or an aircraft and a vessel, are approaching head-on, or nearly so, each shall alter its course to the right to keep well clear.

(d) Overtaking. Each aircraft or vessel that is being overtaken has the right-of-way, and the one overtaking shall alter course to keep well clear.

(e) Special circumstances. When aircraft, or an aircraft and a vessel, approach so as to involve risk of collision, each aircraft or vessel shall proceed with careful regard to existing circumstances, including the limitations of the respective craft.

(f) Landing and taking off. When aircraft, on landing or taking off from the water, shall keep well clear of all vessels and avoid impeding their navigation.

8.8.1.15. Use of Aircraft Lights

(a) If an aircraft has red rotating beacon lights, or other lights installed to show that the engine is running, the pilot shall switch those lights on before starting engines and display those lights at all times the engines are running.

(b) No person may operate an aircraft between the period from sunset to sunrise unless—

(1) It has lighted navigation lights ; and

(2) If anti-collision lights are installed, those lights are lighted.

(c) No person may park or move an aircraft between the period from sunset to sunrise in, or in a dangerous proximity to, a movement area of an aerodrome, unless the aircraft—

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- (1) Is clearly illuminated ;
- (2) Has lighted navigation lights, or
- (3) Is in an area that is marked by obstruction lights, or
- (4) Has lights to indicate when the engine is running.

(d) No person may anchor an aircraft unless that aircraft—

- (1) Has lighted anchor lights ; or
- (2) Is in an area where anchor lights are not required on vessels.

(e) No person may operate an aircraft on water during the period from sunset to sunrise unless—

(1) It displays lights as required by the International Regulations for Preventing Collisions at Sea (most recent edition) ; or

(2) It shall display lights as similar as possible in characteristics and position to those required by the International Regulations for Preventing Collisions at Sea if it is not practical to display the lights exactly as required.

(f) A pilot is permitted to switch off or reduce the intensity of any flashing lights fitted to meet the requirements of this paragraph if they do or are likely to—

- (1) Adversely affect the satisfactory performance of duties ; or
- (2) Subject an outside observer to harmful dazzle.

8.8.1.16. Simulated Instrument Flight.

(a) No person may operate an aircraft in simulated instrument flight unless—

(1) That aircraft, has fully functioning dual controls, except—

- (i) In the case of airships, or
- (ii) In a single engine airplane equipped with a throwover control wheel in place of fixed, dual controls of the elevator and ailerons.

(2) The other control seat is occupied by a safety pilot who holds at least a private pilot licence with category and class ratings appropriate to the aircraft being flown.

(3) The safety pilot has adequate vision forward and to each side of the aircraft, or a competent observer in the aircraft adequately supplements the vision of the safety pilot.

(b) No person may engage in simulated instrument flight conditions during commercial air transport operations.

8.8.1.17. Inflight Simulation of Abnormal Situations.

No person may simulate an abnormal or emergency situation during commercial air transport operations.

8.8.1.18. Dropping, Spraying, Towing.

(a) Except under conditions prescribed by the Authority, no pilot may take the following actions—

- (1) Dropping, dusting or spraying from an aircraft ;
- (2) Towing of aircraft or other objects ; or
- (3) Allowing parachute descents.

8.8.1.19. Aerobatic Flight.

(a) No person may operate an aircraft in aerobatic flight—

- (1) Over any city, town or settlement ;
- (2) Over an open air assembly of persons ;
- (3) Within the lateral boundaries of the surface areas of Class B, C, D or E airspace designated for an aerodrome ;
- (4) Below an altitude of 450 m (1500 ft) above the surface ;
- (5) When the flight visibility is less than 5 km (3 statute miles) ; and
- (6) Unless in compliance with any other conditions prescribed by the Authority.

(b) No person may operate an aircraft in manoeuvres exceeding a bank of 60 degrees or pitch of 30 degrees from level flight attitude unless all occupants of the aircraft are wearing parachutes packed by a qualified parachute rigger, licensed in accordance with Part 2 of these regulations, in the past 12 calendar-months.

8.8.1.20. Flight Test Areas.

(a) No person may flight-test an aircraft except over open water, or sparsely populated areas having light traffic.

8.8.1.21. Prohibited Areas and Restricted Areas.

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(a) No person may operate an aircraft in a prohibited area, or in restricted areas, the particulars of which have been duly published, except in accordance with the conditions of the restrictions or by permission of the State over whose territory the areas are established.

8.8.1.22. Operations in MNPS or RVSM Airspace.

(a) No person may operate a civil aircraft of Nigeria registry in the North Atlantic airspace designated as MNPS airspace or in airspace designated as RVSM without a written authorisation issued by the Authority.

(b) No person may operate an aircraft in MNPS or RVSM airspace, except in accordance with the conditions of the procedures and restrictions required for this airspace.

Note : Nig. CARs Part 7 contains requirements regarding navigation equipment for operations in MNPS and RVSM airspace.

8.8.1.23. Operations on or in the Vicinity of a Controlled or an Uncontrolled Aerodrome.

(a) When approaching to land at an aerodrome, each pilot of :

(1) An aeroplane shall make all turns of that aeroplane to the left; or to the right, if appropriately indicated by the authorities having jurisdiction over that aerodrome ;

(2) A helicopter shall avoid the flow of aeroplanes.

(b) When departing an aerodrome, each pilot of an aircraft shall comply with any traffic patterns established by the authorities having jurisdiction over that aerodrome.

(c) Each pilot of an aircraft shall land and takeoff into the wind unless safety, the runway configurations, or traffic considerations determine that a different direction is preferable.

(d) Each pilot operating an aircraft either on or in the vicinity of an aerodrome shall :

(1) Observe other aerodrome traffic for the purpose of avoiding collision ; and

(2) Conform with or avoid the pattern of traffic formed by other aircraft in operation.

(e) Each pilot of an aircraft when operating to, from, or through an aerodrome having an operational control tower shall also comply with the requirements at Subsection 8.8.2.8.

(f) Aerodrome traffic management at controlled and uncontrolled aerodromes may be supplemented or directed by the use of universal aviation signals, such as the light displays and visual markings described in IS: 8.8.2.11.

8.8.1.24. Aerodrome Traffic Pattern Altitudes-Turbojet, Turbofan, or Large Aircraft.

(a) When arriving at an aerodrome, the PIC of a turbojet, turbofan, or large aircraft shall enter the traffic pattern at least 450 m (1500 ft) AGL until further descent is required for landing.

(b) When departing, the PIC of a turbojet, turbofan, or large aircraft shall climb to 450 m (1500 ft) AGL as rapidly as practicable.

8.8.1.25. Compliance with Visual and Electronic Glide Slopes.

(a) The PIC of an aeroplane approaching to land on a runway served by a visual approach slope indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.

(b) The PIC of a turbojet, turbofan, or large aeroplane approaching to land on a runway served by an ILS shall fly that aeroplane at or above the glide slope from the point of interception to the middle marker.

8.8.1.26. Restriction or Suspension of Operations : Commercial Air Transport.

(a) If a PIC or an AOC holder knows of conditions, including aerodrome and runway conditions, that are a hazard to safe operations, that person shall restrict or suspend all commercial air transport operations to such aerodromes and runways as necessary until those conditions are corrected.

8.8.1.27. Continuation of Flight when Destination Aerodrome is Temporarily Restricted-Commercial Air Transport.

(a) No PIC may allow a flight to continue toward any aerodrome of intended landing where commercial air transport operations have been restricted or suspended, unless :

(1) In the opinion of the PIC, the conditions that are a hazard to safe operations may reasonably be expected to be corrected by the ETA ; or

(2) There is no safer procedure.

8.8.1.28. Interception.

(a) When intercepted by a military or government aircraft, each PIC shall comply with the international standards when interpreting and responding to visual signals and communication as specified in IS : 8.8.1.28.

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(b) No pilot may conduct an international flight unless the procedures and signals relating to interception of aircraft, as specified in IS: 8.8.1.28, are readily available on the flight deck.

8.8.1.29. Noise Abatement Procedures

(a) Each AOC holder shall operate its aircraft in accordance with the noise abatement procedures approved by the Authority.

(b) Unless otherwise directed by the Authority, the noise abatement procedures specified by an AOC holder for any one aeroplane type shall be the same for all aerodromes.

8.8.1.30. Single Pilot Operations-Aeroplane

(a) An aeroplane shall not be operated under the IFR or night by a single pilot unless approved by the State of the Operator.

(b) An aeroplane shall not be operated under IFR or at night by a single pilot unless ;

(1) the flight manual does not require a flight crew of more than one ;

(2) the aeroplane is propeller driven; turbine powered and complies with Subsection 8.7.2.2 (e)(1),

(3) the maximum approved passenger seating configuration is not more than nine, or the aeroplane is propeller driven, turbine powered and complies with Subsection 8.7.2.2(e)(2) and the maximum approved passenger seating configuration is more than nine ;

(4) the maximum certificated take-off mass does not exceed 5700 kg (12566 Ib) ;

(5) the aeroplane is equipped as described in Part 7 : 7.2.1.4 (c)(e) ;

(6) the pilot-in-command has satisfied the requirements of experience, training, checking, and recency described in Subsection 8.10.1.41.

(c) Notwithstanding (b)(2) and (b)(3) above, the aeroplane shall be operated in compliance with Subsection 8.7.2.2(a).

(d) Any exemption for single pilot operations with more than nine passengers shall be authorized by the Authority in the operator's operations specifications, as required by Subsection 8.7.2.2(e)(2).

(e) If such operations are to be conducted outside of Nigeria, Nigeria shall have an arrangement with the States where the operations will be conducted.

8.8.1.31. Single Engine Aeroplane Operations.

(a) Except as provided in (b) and (c) 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.

(b) In approving operations by single-engine turbine-powered aeroplanes, at night and/or in IMC, the State of the Operator shall ensure that the airworthiness certification of the aeroplane is appropriate and that the overall level of safety intended by the provisions of Nig. CARs Parts 5 and 8 is provided by ;

(1) the reliability of the turbine engine ;

(2) the operator's maintenance procedures, operating practices, flight dispatch procedures and crew training programmes ; and

(3) equipment, and other requirements provided in accordance with Subsection 8.7.2.3 and IS : 8.7.2.3

(c) All single-engine turbine-powered aeroplanes operated at night and/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.

8.8.1.32. Aeroplane Operating Procedures for Rates of Climb and Descent

(a) 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 (26 ft)/sec or 450 m (1500 ft)/min (depending on the instrumentation available throughout the last 300 m (1000 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.

Note : Material concerning the development of these procedures is contained in the PANS-OPS (Doc8168) Volume I, Part III, Section 3, Chapter 3.

8.8.1.33. Remotely Piloted Aircraft (RPA)

(a) No person shall operate a RPA in a manner that would cause a hazard to persons, property or other aircraft.

(b) Operating Rules. A person operating a RPA shall comply with the general operating rules as listed below.

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(1) A person operating an RPA, registered in Nigeria or holding an operator certificate from Nigeria, and its RPAS,

(i) Shall not operate in Nigeria without appropriate authorisations from the Authority and other relevant security agencies,

(ii) Shall not engage in international air navigation without appropriate authorisation from the State from which the take-off of the RPA is made.

(iii) Shall not operate across the territory of another State, without special authorisation issued by each State in which the flight is to operate, which shall be obtained prior to take-off if there is reasonable expectation, when planning the operations, that the aircraft may enter the airspace concerned.

Note : This authorisation may be in the form of agreements between the States involved.

(iv) Shall not operate over the high seas without prior coordination with the appropriate ATS Authority, which shall be obtained prior to take-off if there is reasonable expectation, when planning the operations, that the aircraft may enter the airspace concerned.

(v) Shall operate in accordance with conditions specified by the State of Registry, and the State of the Operator if different, and the State(s) in which the flight is to operate.

(vi) Shall ensure that the RPAS meets the performance and equipment carriage requirements for the specific airspace in which the flight is to operate.

(2) Once authorization has been received from the Authority, the operator.

(i) Shall file a flight plan prior to operation of a RPA.

(ii) Shall notify the Authority and ATC immediately in the event of a flight cancellation, and

(iii) Shall, in the case of changes to the proposed flight, submit such changes to the Authority for consideration.

(c) Certificates and Licences. No person may operate an RPA, registered in Nigeria or holding an operator certificate from Nigeria unless the RPA, RPAS and the remote pilot has obtained the proper approvals of the Authority, as listed below.

(1) An RPAS shall be approved, taking into account the interdependencies of the components, in accordance with Nig. CARs Part 5, including :

(i) A certificate of airworthiness for the RPA, and.

(ii) The associated RPAS components specified in the type design certificate and maintained in accordance with national regulations.

(2) An operator shall have an RPAS operator certificate issued in accordance with national regulations.

(3) Remote pilots shall be licensed or have their licences rendered valid in accordance with Nig. CARs Part 2.

(d) Request for Authorisation.

(1) The request for authorisation referred to in paragraph (b) above shall be made by providing the required information in the application form contained in IS 8.8.1.33 ;

(2) A request for authorization to operate an RPA in Nigeria shall be made by following the requirements in Nig. CARs Part 10.2.1.3 and providing the required information in the application form contained in Nig. CARs IS : 8.8.1.33.

8.8.1.34. Unmanned Free Balloons

(a) No person shall operate an unmanned free balloon in a manner that would cause a hazard to persons, property or other aircraft.

(b) Classification. Unmanned free balloons shall be classified as :

(1) *Light* : An unmanned free balloon which carries a payload or one or more packages with a combined mass of less than 4 kg(9 lb), unless qualifying as a heavy balloon below, or

(2) *Medium* : An unmanned free balloon which carries a payload of two or more packages with a combined mass of 4 kg (9 lb) or more, but less than 6 kg, unless qualifying as a heavy balloon ; or

(3) *Heavy* : An unmanned free balloon which carries a payload which :

(i) Has a combined mass of 6 kg (13 lb) or more ; or

(ii) Includes a package of 3 kg (6 lb) or more ; or

(iii) Includes a package of 2 kg (4 lb) or more with an area density of more than 13 g (28 lb) per square centimeter ; or

(iv) Uses a rope or other device for suspension of the payload that requires an impact force of 230N or more to separate the suspended payload from the balloon.

Note 1 : The area density referred to in 8.8.1.34(b)(3)(iii) is determined by dividing the total mass in grams of the payload package by the area in square centimeters of its smallest surface.

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Note 2 : The impact force of 230 N referred to in 8.8.1.34(b)(1)(iv) and (d)(9) is a unit of measure of force equivalent to a breaking strain of greater than 50 lb.

(c) Operating Rules. No person may operate an unmanned free balloon—

- (1) Unless it has received appropriate authorization from Nigeria ;
- (2) Across the territory of another State without appropriate authorization from the other State concerned prior to the launching of the balloon ;
- (3) Except in accordance with the conditions specified by the State of Registry and the State(s) to be overflown ;
- (4) In such a manner that the balloon, or any part thereof, including its payload with the surface of the earth, creates a hazard to persons or property not associated with the operation.
- (5) Over the high seas without prior coordination with the appropriate ATS Authority.

(d) Operating Limitations and Equipment Requirements. No person shall operate a unmanned balloon—

- (1) Without authorization from the appropriate ATS Authority
- (2) At or through any level below 18000 m (60000 ft) pressure-altitude at which :
 - (i) There are clouds or obscuring phenomena of more than 4 oktas coverage ; or
 - (ii) The horizontal visibility is less than 8 km (5 statute miles).
- (3) By releasing it in a manner that will cause it to fly lower than 300 m (1000 ft) over the congested areas of cities, towns or settlements or in open-air assembly of persons not associated with the operation.
- (4) Unless it is equipped with at least two payload flight-termination devices or systems, whether automatic or operated by telecommand, that operate independently of each other.
- (5) That is polyethylene zero-pressure unless is it equipped with at least two methods, systems, devices or combinations thereof, that function independently of each other for terminating the flight of the balloon envelope ;

(6) Unless the balloon envelope is equipped with either a radar reflective device(s) or radar reflective material that will present an echo to surface radar operating in the 200 MHz to 2 700 MHz frequency range, and/or the balloon is equipped with such other devices as will permit continuous tracking by the operator beyond the range of ground-based radar.

(7) In an area where ground-based SSR equipment is in use, unless it is equipped with a secondary surveillance radar transponder, with pressure-altitude reporting capability, which is continuously operating on an assigned code, or which can be turned on when necessary by the tracking station ;

(8) In an area where ground-based ADS-B equipment is in use, unless it is equipped with an ADS-B transmitter, with pressure-altitude reporting capability, which is continuously operated or which can be turned on when necessary by the tracking station.

(9) With a trailing antenna with requires a force of more than 230 N to break it at any point unless the antenna has coloured pennants or streamers that are attached at not more than 15 m intervals ;

(10) Below 18000 m (60000 ft) pressure-altitude between sunset and sunrise or such other period between sunset and sunrise (corrected to the altitude of operations) as may be prescribed by the appropriate ATS Authority, unless the balloon and its attachments and payload, whether or not they become separated during the operations, are lighted ;

(11) That is equipped with a suspension device (other than a highly conspicuously coloured open parachute) more than 15 m (50 ft) long between sunrise and sunset below 18000 m (60000 ft) pressure-altitude unless the suspension device is coloured in alternate bands of high conspicuity colours or has coloured pennants attached.

(e) Termination. The operator of an unmanned free balloon shall activate the appropriate termination device—

(1) When it becomes known that weather conditions are less than those prescribed for the operation ;

(2) If a malfunction or any other reason makes further operation hazardous to air traffic or to persons or property on the surface, or

(3) Prior to unauthorized entry into the airspace over another State's territory.

(f) Preflight Notification.

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(1) No person shall operate a medium or heavy unmanned balloon unless he/she has made the appropriate notification to the ATS unit

(i) The preflight notification contained in (b) below at least seven days prior to the flight, and

(ii) Any changes in the pre-launch information no later than

(A) six hours before the estimated time of launch, or

(B) in the case of solar or cosmic disturbance investigations involving a critical time element, 30 minutes before the estimated time of launch.

(2) The preflight notification shall contain the following :

(i) Balloon flight identification or project code name ;

(ii) Balloon classification and description ;

(iii) SSR code, aircraft address or NDB frequency as applicable ;

(iv) Operator's name and telephone number ;

(v) Estimated time of launch (or time of commencement and completion of multiple launches) ;

(vi) Number of balloons to be launched and the scheduled interval between launches (if multiple launches) ;

(vii) Expected direction of ascent ;

(viii) Cruising level(s) (pressure-altitude) ;

(ix) The estimated elapsed time to pass 18000 m (60000 ft) pressure-altitude or to reach cruising level if at or below 18000 m (60000 ft) together with the estimated location or if the operation consists of continuous launchings, the time to be included is the estimated time at which the first and last in the series will reach the appropriate level ;

(x) The estimated date and time of termination of the flight and the planned location of the impact/recovery area.

(A) In the case of balloons carry out flights of long duration, such that the date and time of termination of the flight and the location of impact cannot be forecast with accuracy, the term "*long duration*" shall be used.

(B) If there is to be more than one location of impact/recover, each location is to be listed together with the appropriate estimated time of impact.

(C) If there is to be a series of continuous impacts, the time to be included is the estimated time of the first and the last in the series.

(g) Notification of launch. The operator of a medium or heavy unmanned free balloon shall, immediately after launch, notify the appropriate ATS unit of the following :

(1) Balloon flight Identification

(2) launch site ;

(3) Actual time of launch ;

(4) Estimate time at which 18000 m (60000 ft) pressure-altitude will be passed, or the estimated time at which the cruising level will be reached if at or below 18000 m (60000 ft) and the estimated location ; and

(5) Any changes to the information previously notified in the preflight notification information.

(h) Notification of cancellation. The operator shall notify the ATS until immediately of a cancellation of the launch of a medium or heavy unmanned free balloon for which a preflight plan has been filed.

(i) Position recording and reports.

(1) The operator of a heavy unmanned balloon shall monitor the flight path of the balloon and forward reports of the balloon's position to the ATS unit as follows—

(i) For operations at or below 18000 m (60000 ft) - every two hours ;

(ii) For operations above 18000 m (60000 ft) - every 24 hours, or

(iii) Immediately if the tracking of the balloon has been lost, providing

(A) the balloons last known position, and

(B) the re-establishment of tracking of the balloon.

(2) The operator of a heavy unmanned balloon shall forward to the ATS unit the following information regarding the balloon one hour before the beginning of the planned descent :

(i) The current geographical position ;

(ii) The current level (pressure-altitude) ;

(iii) The forecast time of penetration of 18000 m (60000 ft) pressure-altitude, if applicable ;

(iv) The forecast time and location of ground impact.

(3) The operator of a medium or heavy unmanned free balloon shall notify the appropriate ATS unit when the operation is completed.

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8.8.1.35. Moored Balloons and Kites.

(a) *Applicability* : This sub-part applies to the operation of moored balloons and kites. However, a person operating a moored balloon or kite within a restricted area must comply with the following requirements and with any additional limitations imposed by the applicable Authority as appropriate.

(b) Operating limitations.

(1) Except as provided in paragraph (2) of this section, no person may operate a moored balloon or kite—

(a) Less than 500 feet from the base of any cloud ;

(b) More than 500 feet above the surface of the earth ;

(c) From an area where the ground visibility is less than three miles ; or

(d) Within five miles of the boundary of any airport.

(2) Paragraph (a) of this section does not apply to the operation of a balloon or kite below the top of any structure and within 250 feet of it, if that shielded operation does not obscure any lighting on the structure.

(c) Notice requirements.

No person may operate an unshielded moored balloon or kite more than 150 feet above the surface of the earth unless, at least 24 hours before beginning the operation, he gives the following information to the ATC facility that is nearest to the place of intended operation :

(1) The names and addresses of the owners and operators.

(2) The size of the balloon or the size and weight of the kite.

(3) The location of the operation.

(4) The height above the surface of the earth at which the balloon or kite is to be operated.

(5) The date, time, and duration of the operation.

(d) Lighting and marking requirements.

(1) No person may operate a moored balloon or kite, between sunset and sunrise unless the balloon or kite, and its mooring lines, are lighted so as to give a visual warning equal to that required for obstructions to air navigation as required in Parts 12 and 14 of these Regulations.

(2) No person may operate a moored balloon or kite between sunrise and sunset unless its mooring lines have colored pennants or streamers attached at not more than 50 foot intervals beginning at 150 feet above the surface of the earth and visible for at least one mile.

(e) Rapid deflation device.

No person may operate a moored balloon unless it has a device that will automatically and rapidly deflate the balloon if it escapes from its moorings. If the device does not function properly, the operator shall immediately notify the nearest ATC facility of the location and time of the escape and the estimated flight path of the balloon.

8.8.1.36. Performance Based Navigation (PBN) Operations.

(a) No person may engage in PBN operations in Nigeria airspace without a written authorisation issued by the Authority or by the State of the operator. The scope of the activity that the operator is authorised to conduct shall be documented and specified :

(1) For commercial operations, in the operations specifications associated to the air operator certificate

(2) For non-commercial operators, by a Letter of Authorisation

(b) No person may operate an aircraft in designated PBN airspace, except in accordance with the conditions of the procedures and restrictions required for this airspace.

Note : Nig. CARs Part 7 contains requirements regarding navigation equipment for PBN operations.

8.8.2. CONTROL OF AIR TRAFFIC

8.8.2.1.—(a) Each PIC shall request an ATC clearance through the submission of a flight plan to an ATC facility, including potential re-clearance in flight.

ATC
Clearance.

(b) Each PIC shall obtain an ATC clearance before operating a controlled flight, or a portion of a flight as a controlled flight.

(c) Whenever an aircraft has requested a clearance involving priority, each PIC shall submit a report explaining the necessity for such priority, if requested by the appropriate ATC facility.

(d) No person operating an aircraft on a controlled aerodrome may taxi on the manoeuvring area or any runway without clearance from the aerodrome control tower.

8.8.2.2. Adherence to ATC Clearances.

(a) When an ATC clearance has been obtained, no PIC may deviate from the clearance, except in an emergency, unless he or she obtains an amended clearance.

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Note 1 : A flight plan may cover only part of a flight, as necessary, to describe that portion of the flight or those manoeuvres which are subject to ATC. A clearance may cover only part of a current flight plan, as indicated in a clearance limit or by reference to specific manoeuvres such as taxiing, landing or taking off.

Note 2 : 8.8.2.2(a) does not prohibit a pilot from cancelling an IFR clearance when operating in VMC conditions or cancelling a controlled flight clearance when operating in airspace that does not required controlled flight.

(b) When operating in airspace requiring controlled flight, no PIC may operate contrary to ATC instructions, except in an emergency.

(c) Each PIC who deviates from an ATC clearance or instructions in an emergency, shall notify ATC of that deviation as soon as possible.

8.8.2.3. Communications

(a) Each person operating an aircraft on a controlled flight shall maintain a continuous listening watch on the appropriate radio frequency of, and establish two-way communication as required with, the appropriate ATC facility.

(b) Each person operating an aircraft on a controlled flight shall, except when landing at a controlled aerodrome, advise the appropriate ATC facility as soon as it ceases to be subject to ATC service.

8.8.2.4. Route to be Flown.

(a) Unless otherwise authorised or directed by the appropriate ATC facility, the PIC of a controlled flight shall, in so far as practicable—

(1) When on an established ATC route, operate along the defined centre line of that route ; or

(2) When on any other route, operate directly between the navigation facilities and/or points defining that route.

(b) The PIC of a controlled flight operating along an ATC route defined by reference to VORs shall change over for primary navigation guidance from the facility behind the aircraft to that ahead of it at, or as close as operationally feasible to, the change-over point, where established.

8.8.2.5. Inadvertent Changes

(a) A PIC shall take the following action in the event that a controlled flight inadvertently deviates from its current flight plan :

(1) Deviation from track. If the aircraft is off track, the PIC shall adjust the heading of the aircraft to regain track as soon as practicable.

(2) Variation in true airspeed. Each PIC shall inform the appropriate ATC facility if the average true airspeed at cruising level between reporting points varies from that given in the flight plan or is expected to vary by plus or minus 5 per cent of the true airspeed.

(3) Change in time estimate. Each PIC shall notify the appropriate ATC facility and give a revised estimated time as soon as possible if the time estimate for a reporting point, flight information region boundary, or destination aerodrome, whichever comes first, is found to be in excess of three minutes from that notified to ATC, or such other period of time as is prescribed by the Authority or on the basis of air navigation regional agreements.

(b) When an ADS agreement is in place, the air traffic services unit shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.

8.8.2.6. ATC Clearance-Intended Changes.

(a) Requests for flight plan changes shall include the following information :

(1) Change of cruising level. Aircraft identification, requested new cruising level and cruising speed at this level, and revised time estimates, when applicable, at subsequent flight information region boundaries.

(2) Change of route :

(i) Destination unchanged. Aircraft identification, flight rules; description of new route of flight including related flight plan data beginning with the position from which requested change of route is to commence; revised time estimates, and any other pertinent information.

(ii) Destination change. Aircraft identification; flight rules; description of revised route of flight to revised destination aerodrome including related flight plan data, beginning with the position from which requested change of route is to commence; revised time estimates; alternate aerodrome(s); any other pertinent information.

8.8.2.7. Position Reports

(a) Each pilot of a controlled flight shall report to the appropriate ATC facility, as soon as possible, the time and level of passing each designated compulsory reporting point, together with any other required information, unless exempted from this requirement by the Authority.

(b) Each pilot of a controlled flight shall make position reports in relation to additional points or intervals when requested by the appropriate ATC facility.

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(c) When operating via data link communications providing position information to the appropriate air traffic services unit, each pilot of a controlled flight shall only provide voice position reports when requested by the appropriate ATC facility.

8.8.2.8. Operations on or in the Vicinity of a Controlled Aerodrome

(a) No person may operate an aircraft to, from, through, or on an aerodrome having an operational control tower unless two-way communications are maintained between that aircraft and the control tower.

(b) On arrival, each PIC shall establish communications required by (a) prior to 7.4 km (4 nautical miles) from the aerodrome when operating from the surface up to and including 760 m(2500 ft).

(c) On departure, each PIC shall establish communications with the control tower before taxi.

(d) Takeoff, landing, taxi clearance. No person may, at any aerodrome with an operating control tower, operate an aircraft on a runway or taxiway or takeoff or land an aircraft, unless an appropriate clearance has been received by ATC.

(e) Communications failure. If the radio fails or two-way communication is lost, a PIC may continue a VFR flight operation and land if :

(1) The weather conditions are at or above basic VFR minimums ;
and

(2) Clearance to land from the ATC tower is given in accordance with the universal light signals and acknowledged by the PIC as contained in IS : 8.8.2.11(e) and (f) for light signals and acknowledgement.

8.8.2.9. Unlawful Interference

(a) A PIC shall, when and if possible, notify the appropriate ATC facility when an aircraft is being subjected to unlawful interference, including—

(1) Any significant circumstances associated with the unlawful interference, and

(2) Any deviation from the current flight plan necessitated by the circumstances.

(b) A PIC shall attempt to land as soon as practicable when an aircraft is subjected to unlawful interference at :

(1) The nearest suitable aerodrome, or

(2) A dedicated aerodrome assigned by the appropriate Authority unless considerations aboard the aircraft dictate otherwise.

(c) No person shall aim laser beam at aircraft.

8.8.2.10. Time Checks

(a) Each PIC shall use Co-ordinated Universal Time (UTC), expressed in hours and minutes of the 24-hour day beginning at midnight, in flight operations.

(b) Each PIC shall obtain a time check before operating a controlled flight and at such other times during the flight as may be necessary.

(c) Whenever time is used in the application of data link communications, it shall be accurate to within one second of UTC.

8.8.2.11. Universal Signals

(a) Upon observing or receiving any of the designated universal aviation signals as contained in IS: 8.8.2.11 and IS: 8.8.1.28, each person operating an aircraft shall take such action as may be required by the interpretation of the signal.

(b) The universal aviation signals shall have only the meaning indicated in the implementing standard.

(c) Each person using universal signals in the movement of aircraft shall only use them for the purpose indicated.

(d) No person may use signals likely to cause confusion with universal aviation signals.

8.8.3. VFR Flight Rules.

8.8.3.1. Visual Meteorological Conditions

(a) No person may operate an aircraft under VFR when the flight visibility is less than, or at a distance from the clouds that is less than that prescribed, or the corresponding altitude and class of airspace in the following table

Airspace and VMC Minimums*			
Airspace Class	A***B C D E	F G	
		Above 900 m (3000 ft) AMSL or above 300m (1000 ft) above terrain, whichever is the higher.	At and below 900 m (3000 ft) AMSL or 300 m (1000 ft) above terrain, whichever is the higher.
Distance from cloud	1500 m (4920 ft) horizontally 300m (1000 ft) vertically		Clear of cloud and in sight of the surface.
Flight visibility	8 km (5 statute miles) at and above 3050 m (10000 ft) AMSL 5 km (3 statute miles) below 3050m (10000 ft) AMSL.		5km(3 statute miles)**
*When the height of the transition altitude is lower than 3050 m (10000 ft) AMSL, FL 100 should be used in lieu of 10000 ft.			
** When so prescribed by the Authority lower flight visibilities to 1500m (4920 ft) may be permitted for flights operating : 1. at speeds that, in the prevailing visibility, will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision ; or 2. in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels. Helicopters may be permitted to operate in less than 1500m(4920 ft)flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.			
***The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace.			

8.8.3.2. VFR Weather Minimums for Takeoff and Landing.

(a) No person may land or takeoff an aircraft under VFR from an aerodrome located within a control zone, or enter the aerodrome traffic zone or traffic pattern airspace unless the—

(1) Reported ceiling is at least 450 m (1500 ft) ; and

(2) Reported ground visibility is at least 5 km (3 statute miles); or, except when a clearance is obtained from ATC.

(b) No person may land or takeoff an aircraft or enter the traffic pattern under VFR from an aerodrome located outside a control zone, unless VMC conditions are at or above those indicated in Subsection 8.8.3.1.

(c) The only exception to the required weather minimums of this subsection is during a Special VFR operation.

8.8.3.3. Special VFR Operations.

(a) No person may conduct a Special VFR flight operation to enter the traffic pattern, land or takeoff an aircraft under Special VFR from an aerodrome located in Class B, Class C, Class D or Class E airspace unless :

(1) Authorised by an ATC clearance ;

(2) The aircraft remains clear of clouds ; and

(3) The flight visibility is at least 1.5 km (1 statute mile).

(b) No person may conduct a Special VFR flight operation in an aircraft between sunset and sunrise unless :

(1) The PIC is current and qualified for IFR operations ; and

(2) The aircraft is qualified to be operated for IFR flight.

8.8.3.4. VFR Cruising Altitudes

(a) Each person operating an aircraft in level cruising flight under VFR at altitudes above 900 m (3000 ft) from the ground or water, shall maintain a flight level appropriate to the track as specified in the table of cruising levels in IS : 8.8.3.4 :

(b) Paragraph (a) does not apply when otherwise authorised by ATC, when operating in a holding pattern, or during maneuvering in turns.

8.8.3.5. ATC Clearances For VFR Flights.

(a) Each pilot of a VFR flight shall obtain and comply with ATC clearances and maintain a listening watch before and during operations :

(1) Within Classes B, C and D airspace ;

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- (2) As part of aerodrome traffic at controlled aerodromes ; and
- (3) Under Special VFR.

8.8.3.6. VFR Flights Requiring ATC Authorisation.

(a) Unless authorised by the Authority, no pilot may operate in VFR flight—

- (1) Above FL 200 ; or
- (2) At transonic and supersonic speeds.

(b) ATC authorisation for VFR flights may not be granted in areas where a VSM of only 300m (1,000 ft) is applied above FL 290.

(c) No person may operate in VFR flight between sunset and sunrise unless :

- (1) Authorised by the Authority, and
- (2) Operating in accordance with any conditions prescribed by the Authority.

8.8.3.7. Weather Deterioration Below VMC.

(a) Each pilot of a VFR flight operated as a controlled flight shall, when he or she finds it is not practical or possible to maintain flight in VMC in accordance with the ATC flight plan—

- (1) Request an amended clearance enabling the aircraft to continue in VMC to its destination or to an alternative aerodrome, or to leave the airspace within which an ATC clearance is required ;
- (2) If no clearance can be obtained, continue to operate in VMC and notify the appropriate ATC facility of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome ;
- (3) Operating within a control zone, request authorisation to operate as a special VFR flight ; or
- (4) Request clearance to operate in IFR, if currently rated for IFR operations.

8.8.3.8. Changing from VFR to IFR.

(a) Each pilot operating in VFR who wishes to change to IFR shall—

- (1) If a flight plan was submitted, communicate the necessary changes to be effected to its current flight plan ; or
- (2) Submit a flight plan to the appropriate ATC facility and obtain a clearance before proceeding IFR when in controlled airspace.

8.8.3.9. Two-way Radio Communication Failure in VFR

(a) If radio failure occurs in VFR while under ATC control, or if VFR conditions are encountered after the failure, each pilot shall—

- (1) Continue the flight under VFR ;
- (2) Land at the nearest suitable aerodrome ; and
- (3) Report arrival to ATC by the most expeditious means possible.

8.8.4. IFR Flight Rules.

8.8.4.1. Applicability

(a) All aircraft operated in accordance with instrument flight procedures shall comply with the instrument flight rules, and the aerodrome instrument approach procedures approved by the NIGERIA where the operation will take place.

8.8.4.2. IFR in Controlled Airspace

(a) No person may operate an aircraft in controlled airspace under IFR unless that person has—

- (b) Filed an IFR flight plan ; and
- (c) Received an appropriate ATC clearance.

8.8.4.3. IFR Flights Outside Controlled Airspace.

(a) Each PIC of an IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the Authority, shall maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the ATC facility providing flight information service.

(b) Each PIC of an IFR flight operating outside controlled airspace for which the Authority requires a flight plan, a listening watch on the appropriate radio frequency and establishment of two-way communication, as necessary, with the ATC facility providing flight information service, shall report position as specified for controlled flights.

8.8.4.4. IFR Takeoff Minimums for Commercial Air Transport.

(a) Unless otherwise authorised by the Authority, no pilot operating an aircraft in commercial air transport operations may accept a clearance to take off from a civil aerodrome under IFR unless weather conditions are at or above :

- (1) For aircraft, other than helicopters, having two engines or less-1,500 m (1 statute mile) visibility.

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(2) For aircraft having more than two engines-800 m (1/2 statute mile) visibility.

(3) For helicopters-800 m (1/2 statute mile) visibility.

8.8.4.5. Minimum Altitudes for IFR Operations.

(a) Operation of aircraft at minimum altitudes. Except when necessary for takeoff or landing, no person may operate an aircraft under IFR below—

(1) The applicable minimum altitudes prescribed by the authorities having jurisdiction over the airspace being overflown ; or

(2) If no applicable minimum altitude is prescribed by the authorities—

(i) Over high terrain or in mountainous areas, at a level which is at least 600 m (2000 ft) above the highest obstacle located within 8 km (5 statute miles) of the estimated position of the aircraft ; and

(ii) Elsewhere than as specified in paragraph (i), at a level which is at least 300 m (1000 ft) above the highest obstacle located within 8 km (5 statute miles) of the estimated position of the aircraft.

(3) If an MEA and a MOCA are prescribed for a particular route or route segment, a person may operate an aircraft below the MEA down to, but not below, the MOCA, when within 40.7 km (22 nautical miles) of the VOR concerned.

(b) Climb for obstacle clearance.

(1) If unable to communicate with ATC, each pilot shall climb to a higher minimum IFR altitude immediately after passing the point beyond which that minimum altitude applies.

(2) If ground obstructions intervene, each pilot shall climb to a point beyond which that higher minimum altitude applies, at or above the applicable Minimum Crossing Altitude.

(c) The State of the Operator shall approve such method only after careful consideration of the probable effects of the following factors on the safety of the operation in question :

(1) The accuracy and reliability with which the position of the helicopter can be determined ;

(2) The inaccuracies in the indications of the altimeters used ;

(3) The characteristics of the terrain (e.g. sudden changes in the elevation) ;

(4) The probability of encountering unfavourable meteorological conditions (e.g. severe turbulence and descending air currents) ;

(5) Possible inaccuracies in aeronautical charts ; and

(6) Airspace restrictions.

8.8.4.6. Minimum Altitudes for use of an Autopilot.

(a) For en route operations, no person may use an autopilot at an altitude above the terrain that is less than 152 m (500 ft).

(b) For instrument approach operations, no person may use an autopilot at an altitude above the terrain that is less than 15 m (50 ft) below the MDA or DH.

(c) For CAT III approaches, the Authority may approve the use of a flight control guidance system with automatic capability to touchdown.

8.8.4.7. IFR Cruising Altitude or Flight Level in Controlled Airspace.

(a) Each person operating an aircraft under IFR in level cruising flight in controlled airspace shall maintain the altitude or flight level assigned that aircraft by ATC.

(b) Each person operating an aircraft in level cruising flight under IFR, or if authorised to employ cruise climb techniques between two levels, shall maintain a flight level appropriate to the track as specified in the table of cruising levels in IS : 8.8.3.4 or according to a modified table of cruising levels when so prescribed in accordance with IS: 8.8.3.4 for flight above FL 410.

(c) Paragraph (c) above does not apply when otherwise authorised by ATC or specified by the Authority in Aeronautical Information Publications.

Note : The requirements for VFR cruising altitudes are in Subsection 8.8.3.4.

8.8.4.8. IFR Cruising Altitude or Flight Level in Uncontrolled Airspace.

(a) Each person operating an aircraft in level cruising flight under IFR, outside of controlled airspace, shall maintain a flight level appropriate to the track as specified in the table of cruising levels in IS : 8.8.3.4 or according to a modified table of cruising levels when so prescribed in accordance with IS : 8.8.3.4 for flight above FL 410.

(b) A person may deviate from the cruising altitudes specified in paragraph (a) only when—

(1) Authorised by ATC for flight at or below 900 m (3000 ft) above MSL ; or

(2) When otherwise authorised by ATC.

8.8.4.9. IFR Radio Communications

(a) Each PIC of an aircraft operated under IFR in controlled airspace shall have a continuous watch maintained on the appropriate frequency and shall report by radio as soon as possible—

(1) The time and altitude of passing each designated reporting point, or the reporting points specified by ATC, except that while the aircraft is under radar control, only the passing of those reporting points specifically requested by ATC need be reported ;

(2) Any unforecast weather conditions encountered ; and

(3) Any other information relating to the safety of flight, such as hazardous weather or abnormal radio station indications.

8.8.4.10. Operation Under IFR in Controlled Airspace-malfunction Reports.

(a) The PIC of each aircraft operated in controlled airspace under IFR shall report as soon as practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.

(b) In each report specified in paragraph (a), the PIC shall include the—

(1) Aircraft identification ;

(2) Equipment affected ;

(3) Degree to which the capability of the pilot to operate under IFR in the ATC system is impaired ; and

(4) Nature and extent of assistance desired from ATC.

8.8.4.11. Continuation of IFR Flight Toward a Destination.

(a) No pilot may continue an IFR flight toward an aerodrome or heliport of intended landing, unless the latest available meteorological information indicates that the conditions at that aerodrome, or at least one destination alternate aerodrome will, at the expected time of arrival, be at or above the specified instrument approach minima.

8.8.4.12. Instrument Approach Procedures and IFR Landing Minimums.

(a) No person may make an instrument approach at an aerodrome except in accordance with IFR weather minimums and instrument approach procedures established for that aerodrome as set forth by the Authority.

(b) No AOC holder may make an instrument approach at an aerodrome except as set forth in the AOC holder's operations specifications.

8.8.4.13. Commencing an Instrument Approach.

(a) No pilot may continue an approach below 300 m (1,000 ft.) above the aerodrome elevation or into the final approach segment unless—

(1) A source approved by the Authority issues a weather report for that aerodrome ; and

(2) The latest weather report for that aerodrome reports the visibility or controlling RVR to be equal to or more than the minimums prescribed for that procedure.

(b) If 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 DH or MDA.

8.8.4.14. Instrument Approaches to Civil Aerodromes

(a) Each person operating a civil aircraft shall use a standard instrument approach procedure prescribed by the authorities having jurisdiction over the aerodrome, unless otherwise authorised by the Authority.

(b) Authorised DH or MDA. For the purpose of this section, when the approach procedure being used provides for and requires the use of a DH or MDA, the authorised DH or MDA is the highest of the following :

(1) The DH or MDA prescribed by the approach procedure.

(2) The DH or MDA prescribed for the PIC.

(3) The DH or MDA for which the aircraft is equipped.

8.8.4.15. Operation Below DH or MDA

(a) Where a DH or MDA is applicable, no pilot may operate a civil aircraft at any aerodrome or heliport below the authorised MDA, or continue an approach below the authorised DH unless—

(1) 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 ;

(2) For commercial air transport operations, a descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing ;

(3) The reported flight visibility is not less than the visibility prescribed in the standard instrument approach being used or the controlling RVR is above the specified minimum ; and

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(4) At least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot—

(i) The approach light system, except that the pilot may not descend below 30 m (100 ft) 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.

(ii) The threshold ;

(iii) The threshold markings ;

(iv) Threshold lights ;

(v) The runway end identifier lights ;

(vi) The visual approach slope indicator ;

(vii) The touchdown zone or touchdown zone markings ;

(viii) The touchdown zone lights ;

(ix) The runway or runway markings ; or

(x) The runway lights.

8.8.4.16. Landing During Instrument Meteorological Conditions.

(a) No pilot operating a civil aircraft may land that aircraft when the flight visibility is less than the visibility prescribed in the standard instrument approach procedure being used.

8.8.4.17. Execution of a Missed Approach Procedure.

(a) Each pilot operating a civil aircraft shall immediately execute an appropriate missed approach procedure when either of the following conditions exists :

(1) Whenever the required visual reference criteria is not met in the following situations :

(i) When the aircraft is being operated below MDA ; or

(ii) Upon arrival at the missed approach point, including a DH where a DH is specified and its use is required, and at any time after that until touchdown.

(2) 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.

8.8.4.18. Change from IFR Flight to VFR Flight

(a) An pilot electing to change from IFR flight to VFR flight shall notify the appropriate ATC facility specifically that the IFR flight is cancelled and then communicate the changes to be made to his or her current flight plan.

(b) When a pilot operating under IFR encounters VMC, he or she may not cancel the IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted VMC.

8.8.4.19. Two-way Radio Communications Failure in IFR.

(a) Communications Failure: General.

(1) In the event of communications failure, the pilot shall attempt to establish communications with the appropriate air traffic control unit using all other available means.

(2) In addition, the pilot shall, when forming part of the aerodrome traffic at a controlled aerodrome, shall keep a watch for such instructions as may be issued by visual signals.

(b) If radio failure occurs in VMC while under ATC control, or if VMC conditions are encountered after the failure, each pilot shall—

(1) Continue the flight under VMC ;

(2) Land at the nearest suitable aerodrome ; and

(3) Report arrival to the appropriate ATC services unit by the most expeditious means possible.

(c) If two-way radio communication failure occurs in IMC, or when the pilot of an IFR flight considers it inadvisable to continue the flight in VMC, the PIC shall :

(1) unless otherwise prescribed on the basis of regional air navigation agreement, in airspace where radar is not used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan ;

(2) in airspace where radar is used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 7 minutes following—

(i) The time the last assigned level or minimum flight altitude is reached ; or

(ii) The time the transponder is set to Code 7600 ; or

(iii) The aircraft's failure to report its position over a compulsory reporting point ; whichever is later, and thereafter adjust level and speed in accordance with the filed flight plan ;

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(3) when being radar vectored or having been directed by ATC to proceed offset using area navigation (RNAV) without a specified limit, rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude ;

(4) proceed according to the current flight plan route to the appropriate designated navigation aid or fix serving the destination aerodrome and, when required to ensure compliance with (5) below, hold over this aid or fix until commencement of descent ;

(5) commence descent from the navigation aid or fix specified in (4) at, or as close as possible to, the expected approach time last received and acknowledged; or, if no expected approach time has been received and acknowledged, at, or as close as possible to the estimated time of arrival resulting from the current flight plan ;

(6) complete a normal instrument approach procedure as specified for the designated navigation aid or fix ; and

(7) land, if possible, within 30 minutes after the estimated time of arrival specified in (5) or the last acknowledged expected approach time, whichever is later.

8.8.4.20. Threshold Crossing Height for 3D Instrument Approach Operations

(a) An operator shall establish operational procedures designed to ensure that an aeroplane being used to conduct 3D precision approach operations crosses the threshold by a safe margin with the aeroplane in the landing configuration and attitude.

8.9. PASSENGERS AND PASSENGER HANDLING

8.9.1. All Passenger Carrying Operations

8.9.1.1. Unacceptable Conduct

(a) No person on board may interfere with a crewmember in the performance of his or her duties.

(b) Each passenger shall fasten his or her seat belt and keep it fastened while the seat belt sign is lighted.

(c) No person on board an aircraft shall recklessly or negligently act or omit to act in such a manner as to endanger the aircraft or persons and property therein.

(d) No person may secrete himself or herself nor secrete cargo on board an aircraft.

(e) No person may smoke while the no-smoking sign is lighted.

(f) No person may smoke in any aeroplane lavatory.

(g) No person may tamper with, disable or destroy any smoke detector installed in any aeroplane lavatory.

8.9.1.2. Refuelling with Passengers Onboard

(a) No PIC may allow an aeroplane to be refuelled when passengers are embarking, on board or disembarking unless—

(1) The aeroplane is manned by qualified personnel ready to initiate and direct an evacuation ; and

(2) Two-way communication is maintained between the qualified personnel in the aeroplane and the ground crew supervising the refuelling.

(b) Helicopters. No PIC may allow a helicopter to be refuelled when passengers are embarking, on board, or disembarking; or the rotors are turning unless—

(1) The helicopter is manned by qualified personnel ready to initiate and direct an evacuation ; and

(2) Two-way communication is maintained between the qualified personnel in the helicopter and the ground crew supervising the refuelling.

8.9.1.3. Passenger Seats, Safety Belts, and Shoulder Harnesses.

(a) The PIC shall ensure that each person on onboard occupies an approved seat or berth with their own individual safety belt and shoulder harness (if installed) properly secured about them during takeoff and landing.

(b) Each passenger shall have his or her seatbelt securely fastened at any other time the PIC determines it is necessary for safety.

(c) A safety belt provided for the occupant of a seat may not be used during takeoff and landing by more than one person who has reached his or her second birthday.

Note : When cabin crewmembers are required in a commercial air transport operation, the PIC may delegate this responsibility, but shall ascertain that the proper briefing has been conducted before takeoff.

8.9.1.4. Passenger Briefing

(a) The PIC shall ensure that crewmembers and passengers are made familiar, by means of an oral briefing or by other means, with the location and use of the following items, if appropriate-

(1) Seat belts ;

(2) Emergency exits ;

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(3) Life jackets ;

(4) Oxygen dispensing equipment ; and

(5) Other emergency equipment provided for individual use, including passenger emergency briefing cards.

(b) The PIC shall ensure that all persons on board are aware of the locations and general manner of use of the principal emergency equipment carried for collective use.

(c) During takeoff and landing, and whenever by reason of turbulence or any emergency occurring during flight the precaution is considered necessary, cabin crewmembers shall ensure that all passengers aboard the aircraft fasten their seat belts so as to be secured in their seats.

(d) For helicopter off-shore operations, the PIC shall ensure that each occupant of the aircraft wear—

(1) A life jacket or integrated survival suit, when operating beyond autorotational distance from land ;

(2) A survival suit, when the sea temperature is less than 10°C or when the estimated rescue time exceeds the calculated survival time.

8.9.1.5. Inflight Emergency Instruction.

(a) In an emergency during flight, the PIC shall ensure that all persons on board are instructed in such emergency action as may be appropriate to the circumstances.

(b) When cabin crewmembers are required in a commercial air transport operation, the PIC may delegate this responsibility, but shall ascertain that the proper briefing has been conducted.

(c) The PIC shall ensure that, during take-off and landing and whenever considered necessary by reason of turbulence or any emergency occurring during flight, all passengers on board a helicopter shall be secured in their seats by means of the seat belts or harnesses provided.

8.9.1.6. Passenger Oxygen-minimum Supply and use.

(a) The PIC shall ensure that breathing oxygen and masks are available to passengers in sufficient quantities for all flights at such altitudes where a lack of oxygen might harmfully affect passengers.

(b) The PIC shall ensure that the minimum supply of oxygen prescribed by the Authority is on board the aircraft.

(c) *Note* : The requirements for oxygen storage and dispensing apparatus are prescribed in Part 7.

(d) The PIC shall require all passengers to use oxygen continuously at cabin pressure altitudes above 4000 m (13000 ft).

(e) Safeguarding of cabin crew and passengers in pressurized aeroplanes in the event of loss of pressurization :

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

8.9.1.7. Alcohol or Drugs

(a) No person may permit the boarding or serving of any person who appears to be intoxicated or who demonstrates, by manner or physical indications, that that person is under the influence of drugs (except a medical patient under proper care).

8.9.2. COMMERCIAL AIR TRANSPORT PASSENGER CARRYING OPERATIONS

8.9.2.1. Passenger Compliance With Instructions.

(a) Each passenger on a commercial air transport flight shall comply with instructions given by a crewmember in compliance with this section.

8.9.2.2. Denial of Transportation.

(a) An AOC holder may deny transportation because a passenger—

(1) Refuses to comply with the instructions regarding exit seating restrictions prescribed by the Authority ; or

(2) Has a handicap that can be physically accommodated only by an exit row seat.

8.9.2.3. Carriage of Persons Without Compliance with These Passenger-Carrying Requirements

(a) The passenger-carrying requirements of paragraph (b) do not apply when carrying—

(1) A crewmember not required for the flight ;

(2) A representative of the Authority on official duty ;

(3) A person necessary to the safety or security of cargo or animals ; or

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(4) Any person authorised by the AOC holder's Operations Manual procedures, as approved by the Authority.

(b) No person may be carried without compliance to the passenger carrying requirements unless—

(1) There is an approved seat with an approved seat belt for that person ;

(2) That seat is located so that the occupant is not in any position to interfere with the flight crewmembers performing their duties ;

(3) There is unobstructed access from their seat to the flight deck or a regular or emergency exit ;

(4) There is a means for notifying that person when smoking is prohibited and when seat belts shall be fastened ; and

(5) That person has been orally briefed by a crewmember on the use of emergency equipment and exits.

8.9.2.4. Cabin Crew at Duty Stations.

(a) During taxi, cabin crewmembers shall remain at their duty stations with safety belts and shoulder harness fastened except to perform duties related to the safety of the aircraft and its occupants.

(b) During takeoff and landing, cabin crewmembers shall be located as near as practicable to required floor level exits and shall be uniformly distributed throughout the aircraft to provide the most effective egress of passengers in event of an emergency evacuation.

(c) When passengers are on board a parked aircraft, cabin crewmembers (or another person qualified in emergency evacuation procedures for the aircraft) will be placed in the following manner :

(1) If only one qualified person is required, that person shall be located in accordance with the AOC holder's Operations Manual procedures.

(2) If more than one qualified person is required, those persons shall be spaced throughout the cabin to provide the most effective assistance for the evacuation in case of an emergency.

8.9.2.5. Evacuation Capability

(a) The PIC, SCCM and other person assigned by the AOC holder shall ensure that, when passengers are on board the aircraft before movement on the surface, at least one floor-level exit provides for egress of passengers through normal or emergency means.

8.9.2.6. Arming of Automatic Emergency Exits.

(a) No person may cause an aeroplane carrying passengers to be moved on the surface, takeoff or land unless each automatically deployable emergency evacuation assisting means installed on the aircraft is ready for evacuation.

8.9.2.7. Accessibility of Emergency Exits and Equipment.

(a) No person may allow carry-on baggage or other items to block access to the emergency exits when the aircraft is moving on the surface, during takeoff or landing, or while passengers remain on board on the ground.

8.9.2.8. Stops Where Passengers Remain Onboard.

(a) At stops where passengers remain on board the aircraft, the PIC, the co-pilot, or both shall ensure that—

(1) All engines are shut down ;

(2) At least one floor level exit remains open to provide for the deplaning of passengers ; and

(3) There is at least one person immediately available 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.

(b) If refueling with passengers on board, the PIC or a designated company representative shall ensure that the AOC holder's Operations Manual procedures are followed.

8.9.2.9. Passenger Loading and Unloading-AOC

(a) No person shall allow passenger loading or unloading of a propeller driven aircraft unless all engines are shut down unless the aircraft is using a passenger jetway to load and unload.

8.9.2.10. Carriage of Persons with Reduced Mobility.

(a) No person may allow a person of reduced mobility to occupy seats where their presence could—

(1) Impede the crew in their duties ;

(2) Obstruct access to emergency equipment ; or

(3) Impede the emergency evacuation of the aircraft.

8.9.2.11. Exit Row Seating.

(a) No AOC holder shall allow a passenger to sit in an emergency exit row if the PIC or SCCM determine 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.

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(b) No cabin crewmember may seat a person 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—

(1) The person lacks sufficient mobility, strength, or dexterity in both arms and hands, and both legs—

(i) To reach upward, sideways, and downward to the location of emergency exit and exit-slide operating mechanisms ;

(ii) To grasp and push, pull, turn, or otherwise manipulate those mechanisms ;

(iii) To push, shove, pull, or otherwise open emergency exits ;

(iv) To lift out, hold, deposit on nearby seats, or manoeuvre over the seatbacks to the next row objects the size and mass of over-wing window exit doors ;

(v) To remove obstructions of size and mass similar to over-wing exit doors ;

(vi) To reach the emergency exit expeditiously ;

(vii) To maintain balance while removing obstructions ;

(viii) To exit expeditiously ;

(ix) To stabilise an eSCCMpe slide after deployment ; or

(x) To assist others in getting off an eSCCMpe slide.

(2) The person is less than 15 years of age or lacks the capacity to perform one or more of the applicable functions listed above without the assistance of an adult companion, parent, or other relative.

(3) The person lacks the ability to read and understand instructions required by this section and related to emergency evacuation provided by the AOC holder in printed or graphic form or the ability to understand oral crew commands.

(4) The person lacks sufficient visual capacity to perform one or more of the above functions without the assistance of visual aids beyond contact lenses or eyeglasses.

(5) The person lacks sufficient aural capacity to hear and understand instructions shouted by cabin crewmembers, without assistance beyond a hearing aid.

(6) The person lacks the ability to adequately impart information orally to other passengers.

(7) The person 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 or she performs one or more of the functions listed above.

(c) Determinations as to the suitability of each person permitted to occupy an exit seat shall be made by the cabin crewmembers or other persons designated in the AOC holder's Operations Manual.

(d) In the event a cabin crewmember 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 crewmember shall expeditiously relocate the passenger to a non-exit seat.

(e) 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 crewmember shall move a passenger who is willing and able to assume the evacuation functions, to an exit seat.

(f) Each AOC ticket agent shall, before boarding, assign seats consistent with the passenger selection criteria and the emergency exit functions, to the maximum extent feasible.

(g) Each AOC ticket agent shall make available for inspection by the public at all passenger loading gates and ticket counters at each aerodrome where the AOC holder conducts passenger operations, written procedures established for making determinations in regard to exit row seating.

(h) Each cabin crewmember shall include in his or her passenger briefings a request that a passenger identify himself or herself to allow reseating if he or she—

(1) Cannot meet the selection criteria ;

(2) Has a nondiscernible condition that will prevent him or her from performing the evacuation functions ;

(3) May suffer bodily harm as the result of performing one or more of those functions ; or

(4) Does not wish to perform emergency exit functions.

(i) Each cabin crewmember shall include in his or her passenger briefings a reference to the passenger information cards and the functions to be performed in an emergency exit.

(j) Each passenger shall comply with instructions given by a crewmember or other authorised employee of the AOC holder implementing exit seating restrictions.

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(k) No PIC may allow taxi or pushback unless at least one required crewmember has verified that all exit rows and eSCCMpe paths are unobstructed and that no exit seat is occupied by a person the crewmember determines is likely to be unable to perform the applicable evacuation functions.

(l) The procedures required by this standard will not become effective until final approval is granted by the Authority. Approval will be based solely upon the safety aspects of the AOC holder's procedures. In order to comply with this standard AOC holders shall—

(1) Establish procedures that address the requirements of this standard ; and

(2) Submit their procedures for preliminary review and approval to the Authority

8.9.2.12. Prohibition Against Carriage of Weapons.

(a) No person may, while on board an aircraft being operated in commercial air transport, carry on or about their person a deadly or dangerous weapon, either concealed or unconcealed. An AOC holder may permit a person to transport a weapon, in accordance with the AOC holder's approved security programme,

(1) If the weapon is unloaded ; and

(2) Both the weapon and ammunition are securely stowed in a place inaccessible to any person during the flight.

(b) Officials or employees of the State, or crewmembers who are authorised to carry weapons on board the aircraft in domestic flights, shall do so in accordance with the AOC holders approved security programme. The PIC shall be notified by the AOC as to the number of armed persons and the location of their seats.

(c) The persons identified in item (b) above may not carry weapons aboard an international flight unless there is prior agreement between NIGERIA and all States in which the operation will be either conducted or overflown.

8.9.2.13. Oxygen for Medical use by Passengers.

(a) An AOC holder may allow a passenger to carry and operate equipment for the storage, generation or dispensing of medical oxygen only as prescribed by the Authority.

(b) No person may smoke, and no crewmember may allow any person to smoke within 3 m (10 ft) of oxygen storage and dispensing equipment carried for the medical use of a passenger.

(c) No crewmember may allow any person to connect or disconnect oxygen dispensing equipment to or from an oxygen cylinder while any other passenger is aboard the aircraft.

8.9.2.14. Carry-on Baggage.

(a) No person may allow the boarding of carry-on baggage unless it can be adequately and securely stowed in accordance with the AOC holder's approved Operations Manual procedures.

(b) No person may allow aircraft passenger entry doors to be closed in preparation for taxi or pushback unless at least one required crewmember has verified that each article of baggage has been properly stowed in overhead racks with approved restraining devices or doors, or in approved locations.

(c) No person may allow carry-on baggage to be stowed in a location that would cause that location to be loaded beyond its maximum placard mass limitation.

8.9.2.15. Carriage of Cargo in Passenger Compartments.

(a) No person may allow the carriage of cargo in the passenger compartment of an aircraft except as prescribed by the Authority below.

(b) Cargo may be carried anywhere in the passenger compartment if it is carried in an approved cargo bin that meets the following requirements—

(1) The bin must withstand the load factors and emergency landing conditions applicable to the passenger seats of the aeroplane in which the bin is installed, multiplied by a factor of 1.15, using the combined mass of the bin and the maximum mass of cargo that may be carried in the bin.

(2) The maximum mass of cargo that the bin is approved to carry and any instructions necessary to insure proper mass distribution within the bin must be conspicuously marked on the bin.

(3) The bin may not impose any load on the floor or other structure of the aeroplane that exceeds the load limitations of that structure.

(4) The bin must be attached to the seat tracks or to the floor structure of the aeroplane, and its attachment must withstand the load factors and emergency landing conditions applicable to the passenger seats of the aeroplane in which the bin is installed, multiplied by either the factor 1.15 or the seat attachment factor specified for the aeroplane, whichever is greater, using the combined mass of the bin and the maximum mass of cargo that may be carried in the bin.

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(5) The bin may not be installed in a position that restricts access to or use of any required emergency exit, or of the aisle in the passenger compartment.

(6) The bin must be fully enclosed and made of material that is at least flame resistant.

(7) Suitable safeguards must be provided within the bin to prevent the cargo from shifting under emergency landing conditions.

(8) The bin may not be installed in a position that obscures any passenger's view of the "seat belt" sign, "no smoking" sign, or any required exit sign, unless an auxiliary sign or other approved means for proper notification of the passenger is provided.

(c) Cargo, including carry-on baggage, must not be stowed in toilets.

(d) Cargo, including carry-on baggage must not be stowed against bulkheads or dividers in passenger compartments that are incapable of restraining articles against movement forwards, sideways or upwards and unless the bulkheads or dividers carry a placard specifying the greatest mass that may be placed there, provided that :

(1) It is properly secured by a safety belt or other tie-down having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions.

(2) It is packaged or covered to avoid possible injury to occupants.

(3) It does not impose any load on seats or in the floor structure that exceeds the load limitation for those components.

(4) It is not located in a position that obstructs the access to, or use of, any required emergency or regular exit, or the use of the aisle between the crew and the passenger compartment, or is located in a position that obscures any passenger's view of the "seat belt" sign, "no smoking" sign or placard, or any required exit sign, unless an auxiliary sign or other approved means for proper notification of the passengers is provided.

(e) Cargo, including carry-on baggage, may be carried anywhere in the passenger compartment of a small aircraft if it is carried in an approved cargo rack, bin, or compartment installed in or on the aircraft, if it is secured by an approved means, or if it is carried in accordance with each of the following—

(1) For cargo, it is properly secured by a safety belt or other tie-down having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions, or for carry-on baggage, it is restrained so as to prevent its movement during air turbulence.

(2) It is packaged or covered to avoid possible injury to occupants.

(3) It does not impose any load on seats or in the floor structure that exceeds the load limitation for those components.

(4) It is not located in a position that obstructs the access to, or use of, any required emergency or regular exit, or the use of the aisle between the crew and the passenger compartment, or is located in a position that obscures any passenger's view of the "seat belt" sign, "no smoking" sign or placard, or any required exit sign, unless an auxiliary sign or other approved means for proper notification of the passengers is provided.

(5) It is not carried directly above seated occupants.

(6) It is stowed in compliance with these restrictions during takeoff and landing.

(7) For cargo-only operations, if the cargo is loaded so that at least one emergency or regular exit is available to provide all occupants of the aircraft a means of unobstructed exit from the aeroplane if an emergency occurs.

8.9.2.16. Passenger Information Signs.

(a) The PIC shall turn on required passenger information signs during any movement on the surface, for each takeoff and each landing, and when otherwise considered to be necessary.

8.9.2.17. Required Passenger Briefings

(a) No person may commence a takeoff unless the passengers are briefed before takeoff in accordance with the AOC holder's Operations Manual procedures on—

(1) Smoking limitations and prohibitions ;

(2) Emergency exit location and use ;

(3) Use of safety belts ;

(4) Emergency floatation means location and use ;

(5) Fire extinguisher location and operation ;

(6) Placement of seat backs ;

(7) If flight is above 3050 m (10000 ft) MSL, the normal and emergency use of oxygen ; and

(8) The passenger briefing card.

(9) Use of other specialised equipment as required by the Authority.

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(b) Immediately before or immediately after turning the seat belt sign off, the PIC or co-pilot shall ensure that the passengers are briefed to keep their seat belts fastened while seated, even when the seat belt sign is off.

(c) Before each takeoff, the PIC or co-pilot shall ensure that any persons of reduced mobility are personally briefed on-

(1) The route to the most appropriate exit ; and

(2) The time to begin moving to the exit in event of an emergency.

8.9.2.18. Passenger Briefing-Extended Overwater Operations.

(a) No person may commence extended overwater operations unless all passengers have been orally briefed on the location and operations of life preservers, liferafts and other flotation means, including a demonstration of the method of donning and inflating a life preserver.

8.9.2.19. Passenger Seat Belts.

(a) Each passenger occupying a seat or berth shall fasten his or her safety belt and keep it fastened while the "Fasten Seat Belt" sign is lighted or, in aircraft not equipped with such a sign, whenever instructed by the PIC.

(b) No passenger safety belt may be used by more than one occupant during takeoff and landing.

(c) At each unoccupied seat, the safety belt and shoulder harness, if installed, shall be secured so as not to interfere with crewmembers in the performance of their duties or with the rapid egress of occupants in an emergency.

Note 1 : A person who has not reached his or her second birthday may be held by an adult who is occupying a seat or berth.

Note 2 : 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.

8.9.2.20. Passenger Seat Backs

(a) No PIC or co-pilot may allow the takeoff or landing of an aircraft unless each passenger seat back is in the upright position.

8.9.2.21. Stowage of Food, Beverage and Passenger Service.

(d) No PIC, co-pilot or SCCM may allow the movement of an aircraft on the surface, or the takeoff or landing of an aircraft—

(1) When any food, beverage or tableware furnished by the AOC holder is located at any passenger seat ; and

(2) Unless each food and beverage tray and seat back tray table is in the stowed position.

8.9.2.22. Securing of Items of Mass in Passenger Compartment.

(a) No person may allow the takeoff or landing of an aircraft unless each item of mass in the passenger cabin is properly secured to prevent it from becoming a hazard during taxi, takeoff and landing and during turbulent weather conditions.

(b) No person may allow an aircraft to move on the surface, takeoff or land unless each passenger serving cart is secured in its stowed position.

8.10. CREWMEMBER AND FLIGHT OPERATIONS OFFICER QUALIFICATIONS: COMMERCIAL AIR TRANSPORT

8.10.1.1. Limitation of Privileges of Pilots who have Attained Their 60th Birthday and Curtailment of Privileges of Pilots who have Attained Their 65th Birthday.

(a) No person may serve nor may any AOC holder use a person as a required PIC in single pilot operations on aircraft engaged in commercial air transport operations if that person has reached his or her 60th birthday.

(b) For aircraft engaged in commercial air transport operations requiring more than one pilot as flight crewmembers, the AOC holder may use one pilot up to age 65 provided that the other pilot is less than age 60.

(c) For aircraft engaged in long-range commercial air transport operations requiring more than one pilot as flight crewmembers, the AOC holder may use one pilot up to age 65 provided that the other pilot is less than age 60.

(d) Check airmen who have reached their 65th birthday or who do not hold an appropriate medical certificate may continue their check airman functions, but may not serve as or occupy the position of a required pilot flight crewmember on an aeroplane engaged in international commercial air transport operations unless the other pilot is less than age 60.

8.10.1.2. Use of Flight Simulation Training Devices.

(a) Each flight simulation training device that is used for flight crewmember qualification shall—

(1) Be specifically approved by the Authority for—

(i) The AOC holder ;

(ii) The type aircraft, including type variations, for which the training or check is being conducted ; and