

**STATUTORY INSTRUMENTS SUPPLEMENT**

*to The Uganda Gazette No. 11, Volume CXIII, dated 17th February, 2020*

Printed by UPPC, Entebbe, by Order of the Government.

---

---

**S T A T U T O R Y   I N S T R U M E N T S**

**2020 No. 32.**

**THE CIVIL AVIATION (OPERATION OF AIRCRAFT – COMMERCIAL  
AIR TRANSPORT AEROPLANE) REGULATIONS, 2020**

**ARRANGEMENT OF REGULATIONS**

*Regulation*

**PART I—PRELIMINARY PROVISIONS**

1. Title
2. Interpretation
3. Application of Regulations

**PART II—GENERAL**

4. Compliance with laws, regulations and procedures
5. Registration markings
6. Airworthiness and safety precautions
7. Certificate of airworthiness
8. Inoperative instruments and equipment
9. Aircraft flight manual, marking and placard requirements
10. Required aircraft and equipment
11. Electronic flight bag
12. Documents to be carried on aircraft
13. Production of documents
14. Preservation of documents
15. Insurance

16. Stowaways
17. Co-ordination of activities potentially hazardous to civil aircraft
18. Power to prohibit or restrict flying or landing or taking off
19. Balloons, kites and airships
20. Compliance by a foreign operator with laws, regulations and procedures of an Authority
21. Surveillance of operations by a foreign operator
22. Safety management
23. Imperiling the safety of persons and property
24. Use of psychoactive substances
25. Aircraft tracking

### PART III—FLIGHT OPERATIONS

26. Operating facilities
27. Operational certification and supervision
28. Air operator certificate
29. Surveillance of operations by a foreign operator
30. Operations manual
31. Operating instructions - general
32. In-flight simulation of emergency situations
33. Checklists
34. Altimeter settings
35. Operation of radio in aircraft
36. Minimum flight altitudes
37. Aerodrome operating minima
38. Category II and Category III operations – general operating rules
39. Category II and Category III operations manual
40. Threshold crossing height for 3D instrument approach operations
41. Fuel and oil records
42. Crew-pilot in command (PIC)
43. Pre-flight action
44. Loading of aircraft

45. Stowage of baggage and cargo
46. Passengers
47. Required passenger briefings
48. Carriage of persons with reduced mobility
49. Exit row seating
50. Passenger seat belts
51. Passenger seat backs
52. Stowage of food and beverage for passenger service
53. Securing of items of mass in passenger compartment
54. Unacceptable conduct
55. Alcohol or drugs
56. Carriage of munitions of war
57. Prohibition against carriage of weapons
58. Least risk bomb location and stowage of weapons
59. Passenger compliance with instructions
60. Denial of transportation
61. Passenger information signs
62. Carriage of persons without compliance with passenger carrying requirements
63. Evacuation capability
64. Flight preparation
65. Operational flight planning
66. En-route limitations- all engines operating
67. En-route limitations- one engine inoperative
68. En-route limitations- three or more engines, two engines inoperative
69. Alternate Aerodromes
70. Maximum distance from an adequate aerodrome for two engine aeroplanes without an extended diversion time operations (EDTO) approval
71. Extended diversion time operations (EDTO)
72. Requirements for operations beyond 60 minutes to an en-route alternate aerodrome
73. Requirements for extended diversion time operations (EDTO)

74. Time capability of cargo compartment fire suppression system
75. Operation in performance-based navigation (PBN), minimum navigation performance specification (MNPS) or reduced vertical separation minimum (RVSM) airspace
76. Reports of height keeping performance
77. Electronic navigation data management
78. Compliance with visual and electronic glide slope
79. Restriction or suspension of operations
80. Continuation of flight when destination aerodrome is temporarily restricted
81. Metrological conditions-VFR flights
82. Metrological conditions- instrument flight rules (IFR) flights
83. Visibility- cloud base
84. Icing conditions
85. Fuel requirements
86. In-flight fuel management
87. Refueling with passengers on board
88. Oxygen supply
89. In-flight procedures-aerodrome operating minima
90. Meteorological observations
91. Hazardous flight conditions
92. Flight crew members at duty station
93. Use of oxygen
94. Safeguarding of cabin crew and passengers in pressurized aeroplanes in the event of loss of pressurization
95. In-flight operational instructions
96. Instrument flight procedures
97. Instrument flight rules takeoff minima
98. Instrument approach procedures and instrument flight rules landing minima
99. Commencing an instrument approach
100. Threshold crossing height for precision approaches
101. Operations below decision height or minimum descent altitude

- 102. Landing during instrument meteorological conditions
- 103. Execution of a missed approach procedure
- 104. Minimum altitudes for use of an autopilot
- 105. Minimum flight altitudes
- 106. Receiver failure
- 107. Aeroplane operating procedures for noise abatement
- 108. Aeroplane operating procedures for rates of climb, descent and landing performance
- 109. Duties of pilot-in-command
- 110. Duties of flight operations officers or flight dispatcher.
- 111. Additional requirements for operations by aeroplanes with turbine engines beyond 60 minutes to an en-route alternate aerodrome including extended diversion time operations (EDTO)
- 112. Carry-on baggage
- 113. Additional requirements for single pilot operations under the instrument flight rules (IFR) or at night
- 114. Location of an aircraft in distress

#### PART IV—AEROPLANE PERFORMANCE OPERATING LIMITATIONS

- 115. General.
- 116. Performance limitation of aeroplanes above 5700kg
- 117. Mass limitations
- 118. Obstacle data
- 119. Additional requirements for operations of single-engine turbine-powered aeroplanes at night or in instrument metrological conditions (IMC)

#### PART V — AEROPLANE INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS

- 120. General
- 121. Equipping of all aeroplanes
- 122. Marking of break in points

## PART VI— AEROPLANE CONTINUING AIRWORTHINESS

123. Operator's continuing airworthiness responsibilities
124. Operator's maintenance control manual
125. Maintenance program
126. Continuing airworthiness records
127. Continuing airworthiness information
128. Modifications and repairs
129. Approved maintenance organisations
130. Issue of approval
131. Maintenance organisations procedures manuals
132. Safety management
133. Maintenance procedures and quality assurance system
134. Facilities
135. Personnel
136. Records
137. Maintenance release

## PART VII— AEROPLANE FLIGHT CREW

138. Composition of the flight crew
139. Radio operator
140. Flight engineer
141. One pilot qualified to perform flight engineers functions
142. Flight crew member emergency duties.
143. Flight crew member training programme
144. Duties during critical phases of flight
145. Manipulation of the controls
146. Power to inspect
147. Recent experience – pilot in command and co-pilot
148. Pilot operating limitations and pairing requirements
149. Recent experience – cruise relief pilot
150. Pilot in command area, route, and aerodrome qualification
151. Pilot in command (PIC) aeronautical experience small aircraft

152. Co-pilot license requirements
153. Pilot age restriction
154. Pilot in command (PIC) license requirements- turbojet, turbofan or large aircraft
155. Pilot proficiency checks
156. Single pilot operations under the instrument flight rules (IFR) or at night
157. Pilot authorization in lieu of a type rating
158. Licenses required
159. Pilots- qualifications
160. Fitness of crew members
161. Special authorisations required for Category II or Category III operations
162. Recording of flight time
163. Completion of the technical logbook
164. Reporting mechanical irregularities
165. Reporting of facility and navigational inadequacies
166. Pilot privileges and limitations
167. Flight crew equipment
168. Crew resource management training
169. Initial emergency equipment drills
170. Initial aircraft ground training – flight crew
171. Initial ground training – cabin crew
172. Competence checks- cabin crew members
173. Initial aircraft training - flight operations officer
174. Initial flight training- flight crew member
175. Initial specialized operations training
176. Aircraft differences training
177. Use of synthetic flight trainers
178. Aircraft and instrument proficiency checks
179. Introduction of new equipment or procedures
180. Flight engineer proficiency checks
181. Competence checks- flight operations officer

182. Supervised line flying- pilots
183. Supervised line flying- flight engineers
184. Supervised line experience- cabin crew
185. Line observations- flight operations officer
186. Route and area checks- pilot qualifications
187. Low minimum authorization - pilot in command (PIC)
188. Designated special aerodromes and heliports- pilot in command (PIC) qualification
189. Designated special airport qualifications aerodrome limitations
190. Recurrent training and recurrent checking- flight crew members
191. Recurrent training- cabin crew members
192. Recurrent training- flight operations officer
193. Check pilot training
194. Authorized instructor or synthetic flight trainer and authorized instructor training
195. Authorized instructor qualifications
196. Check pilot and authorized flight engineer qualifications
197. Check pilot designation, authorizations and limitations
198. Synthetic flight trainer approval
199. Line qualification- check pilot and instructor
200. Termination of a proficiency, competence or line check
201. Recording of crew member qualifications
202. Monitoring of training and checking activities
203. Eligibility period

#### PART VIII— FLIGHT OPERATIONS OFFICERS AND FLIGHT DISPATCHERS

204. Flight operations officers and flight dispatcher- persons qualified in flight release
205. Company procedures indoctrination

#### PART IX— MANUALS, LOGS AND RECORDS

206. Flight manual
207. Operator's maintenance control manual



- 208. Maintenance programme
- 209. Journey log book
- 210. Records of emergency and survival equipment carried
- 211. Portable electronic devices
- 212. Flight recorder records

#### PART X— CABIN CREW

- 213. Assignment of emergency duties
- 214. Cabin crew at emergency evacuations stations
- 215. Arming of automatic emergency exits
- 216. Accessibility of emergency exits and equipment
- 217. Stops where passengers remain on board
- 218. Protection of cabin crew during flight
- 219. Training

#### PART XI— SECURITY

- 220. Security of the flight crew compartment
- 221. Aeroplane search procedure checklist
- 222. Security training programme
- 223. Reporting acts of unlawful interference
- 224. Miscellaneous

#### PART XII— DANGEROUS GOODS

- 225. Operators with no approval to transport dangerous goods as cargo
- 226. Operators transporting dangerous goods as cargo
- 227. Provision of information
- 228. Revocation.

## SCHEDULES

SCHEDULE 1 - Currency point

SCHEDULE 2 - Altimetry System Performance Requirements for Operations in Reduced Vertical Separation Minimum (RVSM) Airspace

SCHEDULE 3 - Additional Requirements for Approved Operations by Single-Engine Turbine-Powered Aeroplanes at Night and In Instrument Flight Rules (IFR)

# STATUTORY INSTRUMENTS

2020 No. 32.

## **Civil Aviation (Operation of Aircraft-Commercial Air Transport Aeroplane) Regulations 2020**

*(Under Section 61 of the Civil Aviation Authority Act, Cap 354)*

IN EXERCISE of the powers conferred upon the Minister responsible for transport by section 61 of the Civil Aviation Authority Act, Cap 354 and on the recommendation of the Uganda Civil Aviation Authority, these Regulations are made this 5th day of February, 2020.

### PART I—PRELIMINARY PROVISIONS

#### **1. Title**

These Regulations may be cited as the Civil Aviation (Operation of Aircraft - Commercial Air Transport Aeroplane) Regulations, 2020.

#### **2. Interpretation**

In these Regulations, unless the context otherwise requires—

“accelerate-stop distance available” means the length of the take-off run available plus the length of stop way, if provided;

“acts of unlawful interference” means acts or attempted acts aimed at jeopardizing the safety of civil aviation and air transport, such as—

- (a) unlawful seizure of aircraft in flight;
- (b) unlawful seizure of aircraft on the ground;
- (c) hostage-taking on board an aircraft or on aerodromes;
- (d) forcible intrusion on board an aircraft, at an airport or on the premises of an aeronautical facility;

- (e) introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes; and
- (f) communication of false information as to jeopardize the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public, at an airport or on the premises of a civil aviation facility;

“advisory airspace” means an airspace of defined dimensions, or designated route, within which air traffic advisory service is available;

“aerial work” means an aircraft operation in which an aircraft is used for specialized services including agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement;

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

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

- (a) take-off, expressed in terms of runway visual range and visibility and, if necessary, cloud conditions;
- (b) landing in 2D instrument approach operations, expressed in terms of visibility and runway visual range, minimum descent altitude or height (MDA or MDH) and, if necessary, cloud conditions; and
- (c) landing in 3D instrument approach operations, expressed in terms of visibility and runway visual range and decision altitude or height (DA or DH) as appropriate to the type and category of the operation;

- “aeroplane” means a power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;
- “airworthy” means the status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation;
- “air operator certificate (AOC)” means a certificate authorizing an operator to carry out specified commercial air transport operations;
- “air traffic service (ATS)” is a generic term that means variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service);
- “aircraft” means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth’s surface;
- “aircraft operating manual” means a manual, acceptable to the Authority, containing normal, abnormal and emergency procedures, checklists, limitations, performance information, details of the aircraft systems and other material relevant to the operation of the aircraft;
- “aircraft tracking” means a process, established by an operator that maintains and updates, at standardized intervals, a ground-based record of the four-dimensional position of individual aircraft in flight;
- “alternate aerodrome” means an aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing where the necessary services and facilities are available, where aircraft performance requirements can be met and which is operational at the expected time of use and includes—

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

“altimetry system error (ASE)” means the difference between the altitude indicated by the altimeter display, assuming a correct altimeter barometric setting, and the pressure altitude corresponding to the undisturbed ambient pressure;

“appropriate airworthiness requirements” means the comprehensive and detailed airworthiness codes established, adopted or accepted by the Authority for the class of aircraft, engine or propeller under consideration;

“area navigation (RAAV)” means a method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these;

“area navigation specification” means a navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1;

“automatic deployable emergency locator transmitter (ELT)” means an emergency locator transmitter (ELT) which is rigidly attached to an aircraft and which is automatically

deployed and activated by impact, and, in some cases, also by hydrostatic sensors;

“automatic deployable flight recorder (ADFR)” means a combination flight recorder installed on the aircraft which is capable of automatically deploying from the aircraft;

“automatic fixed emergency locator transmitter (ELT)” means an automatically activated emergency locator transmitter (ELT) which is permanently attached to an aircraft;

“automatic portable emergency locator transmitter (ELT)” means an automatically activated emergency locator transmitter (ELT) which is rigidly attached to an aircraft but which is readily removable from the aircraft;

“cabin crew member” means a **crew member** who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member;

“combined vision system (CVS)” means a system to display images from a combination of an enhanced vision system (EVS) and a synthetic vision system (SVS);

“commercial air transport operation” means an aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire;

“commercial material (COMAT)” means an operators material carried on an operator’s aircraft for the operator’s own purposes;

“configuration deviation list (CDL)” means a list established by the organisation responsible for the type design with the approval of the State of Design which identifies any external parts of an aircraft type which may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction;

“contaminated runway” means a runway contaminated when a significant portion of the runway surface area (whether in isolated areas or not) within the length and width being used is covered by one or more of the substances listed in the runway surface condition descriptors.

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

“continuing airworthiness records” means records which are related to the continuing airworthiness status of an aircraft, engine, and propeller or associated part.

“continuous descent final approach (CDFA)” means a technique, consistent with stabilized approach procedures, for flying the final approach segment of a non-precision instrument approach procedure as a continuous descent, without level-off, from an altitude or height at or above the final approach fix altitude or height to a point approximately 15 m (50 ft.) above the landing runway threshold or the point where the flare maneuver should begin for the type of aircraft flown;

“crew member” means a person assigned by an operator to duty on an aircraft during a flight duty period;

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

“cruising level” means a level maintained during a significant portion of a flight;

“currency point” has the value assigned to it in Schedule 1;

“dangerous goods” means an articles or substances which are capable of posing a risk to health, safety, property or the



environment and which are shown in the list of dangerous goods in the technical instructions or which are classified according to those instructions;

“Decision altitude (DA) or Decision height (DH). A specified altitude or height in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

“duty” means any task that flight or cabin crew members are required by the operator to perform, including flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue;

“duty period” means a period which starts when a flight or cabin crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties;

“electronic flight bag (EFB)” means an electronic information system comprised of equipment and applications for flight crew, which allows for the storing, updating, displaying and processing of EFB functions to support flight operations or duties;

“emergency locator transmitter (ELT)” means a generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated;

“engine” means a unit used or intended to be used for aircraft propulsion consisting of at least those components and equipment necessary for functioning and control, excluding the propeller/rotors (if applicable).

“enhanced vision system (EVS)” means a system to display electronic real-time images of the external scene achieved through the use of image sensors;

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

“extended diversion time operations (EDTO) critical fuel” means the fuel quantity necessary to fly to an en-route alternate aerodrome considering, at the most critical point on the route, the most limiting system failure;

“extended diversion time operations (EDTO) significant system” means an aeroplane system whose failure or degradation could adversely affect the safety particular to an extended diversion time operations (EDTO) flight, or whose continued functioning is specifically important to the safe flight and landing of an aeroplane during an extended diversion time operations (EDTO) diversion;

“fatigue” means a physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and workload (mental and physical activity) that can impair a person’s alertness and ability to perform safety-related operational duties;

“fatigue risk management system (FRMS)” means a data-driven system of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness;

“final approach segment (FAS)” means that segment of an instrument approach procedure in which alignment and descent for landing are accomplished;

- “flight crew member” means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;
- “flight data analysis” means a process of analyzing recorded flight data in order to improve the safety of flight operations;
- “flight duty period” means a period which commences when a flight or cabin crew member is required to report for duty that includes a flight or a series of flights and which finishes when the aeroplane finally comes to rest and the engines are shut down at the end of the last flight on which he or she is a crew member;
- “flight manual” means a manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft;
- “flight operations officer or flight dispatcher” means a person designated by the operator to engage in the control and supervision of flight operations, licensed, who is suitably qualified and who supports, briefs and assists the pilot-in-command in the safe conduct of a flight;
- “flight plan” means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;
- “flight recorder” means any type of recorder installed in the aircraft for the purpose of complementing accident and incident investigation;
- “flight safety documents system” means a set of interrelated documentation established by the operator, compiling and

organizing information necessary for flight and ground operations, and comprising, as a minimum, the operations manual and the operator's maintenance control manual;

“flight simulation training device” means any one of the following three types of apparatus in which flight conditions are simulated on the ground—

- (a) a flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;
- (b) a flight procedures trainer, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;
- (c) a basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions;

“flight time-aeroplanes” means the total time from the moment an aeroplane first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight;

“ground handling” means a services necessary for an aircraft's arrival at, and departure from, an airport, other than air traffic services;

“head-up display (HUD)” means a display system that presents flight information into the pilot's forward external field of view;

“human factors principles” means principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance;

“human performance” means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations;

“instrument approach operations” means an approach and landing using instruments for navigation guidance based on an instrument approach procedure using—

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

“instrument approach procedure (IAP)” means a series of predetermined maneuvers by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply and is classified as—

- (a) non-precision approach (NPA) procedure that is an instrument approach procedure designed for 2D instrument approach operations Type A;
- (b) approach procedure with vertical guidance (APV) that is a performance-based navigation (PBN) instrument approach procedure designed for 3D instrument approach operations Type A; and

- (c) precision approach (PA) procedure that is an instrument approach procedure based on navigation systems (ILS, MLS, GLS and SBAS CAT I) designed for 3D instrument approach operations Type A or B;

“instrument meteorological conditions (IMC)” means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions;

“isolated aerodrome” means a destination aerodrome for which there is no destination alternate aerodrome suitable for a given aeroplane type;

“landing distance available (LDA)” means the length of runway which is declared available and suitable for the ground run of an aeroplane landing;

“large aeroplane” means an aeroplane of a maximum certificated take-off mass of over 5 700 kg.

“maintenance” means the performance of tasks required to ensure the continuing airworthiness of an aircraft, including overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair;

“maintenance organization’s procedures manual” means a document endorsed by the head of the maintenance organization which details the maintenance organization’s structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems;

“maintenance programme” means a document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of those aircraft to which it applies;

“maintenance release” means a document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner in accordance with appropriate airworthiness requirements;

“master minimum equipment list (MMEL)” means a list established for a particular aircraft type by the organisation responsible for the type design with the approval of the State of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight and the minimum equipment list (MMEL) may be associated with special operating conditions, limitations or procedures;

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

“maximum mass” means maximum certificated take-off mass;

“minimum descent altitude (MDA)” and “minimum descent height (MDH)” means a specified altitude or height in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference;

“minimum equipment list (MEL)” means a list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the minimum equipment list (MEL) established for the aircraft type;

“modification” means a change to the type design of an aircraft, engine or propeller and a modification may also include the embodiment of the modification which is a maintenance task subject to a maintenance release.

“navigation specification” means a set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace;

“night” means the hours between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise, as may be prescribed by the appropriate authority;

“obstacle clearance altitude (OCA)” and “obstacle clearance height (OCH)” means the lowest altitude or the lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable, used in establishing compliance with appropriate obstacle clearance criteria;

“operational control” means the exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight;

“operational flight plan” means the operator’s plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned;

“operations manual” means a manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties;

“operations specifications” means the authorizations, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual;

“operator” means the person, organisation or enterprise engaged in or offering to engage in an aircraft operation;



“operator’s maintenance control manual” means a document which describes the operator’s procedures necessary to ensure that all scheduled and unscheduled maintenance is performed on the operator’s aircraft on time and in a controlled and satisfactory manner;

“performance-based communication (PBC)” means communication based on performance specifications applied to the provision of air traffic services;

“performance-based navigation (PBN)” means area navigation based on performance requirements for aircraft operating along an air traffic service (ATS) route, on an instrument approach procedure or in a designated airspace;

“performance-based surveillance (PBS)” means surveillance based on performance specifications applied to the provision of air traffic services;

“pilot-in-command” means the pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight;

“point of no return” means the last possible geographic point at which an aircraft can proceed to the destination aerodrome as well as to an available en-route alternate aerodrome for a given flight;

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

“procedures manual” means a document endorsed by the head of the maintenance organisation which details the maintenance organisation’s structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems;

“repair” means the restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the type certificate for the respective aircraft type, after it has been damaged or subjected to wear;

“required communication performance (RCP) specification” means a set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication;

“required navigation performance (RNP) specification” means navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH;

“required surveillance performance (RSP) specification” means a set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance;

“rest period” means a continuous and defined period of time, subsequent to or prior to duty, during which flight or cabin crew members are free of all duties;

“runway visual range (RVR)” means the range over which the pilot of an aircraft on the center, the runway surface markings or the lights delineating the runway or identifying its center line;

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

“safety management system (SMS)” means a systematic approach to managing safety, including the necessary organisational structures, accountability, responsibilities, policies and procedures;

“State of Registry” means the State on whose register the aircraft is entered;

“psychoactive substance” means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, but does not include coffee and tobacco;

“State of the aerodrome” means the State in whose territory the aerodrome is located;

“State of the operator” means the State in which the operator’s principal place of business is located or, where there is no such place of business, the operator’s permanent residence;

“survival emergency locator transmitter (ELT)” means an emergency locator transmitter (ELT) which is removable from an aircraft, and which is stowed so as to facilitate its ready use in an emergency, and which may be manually activated by survivors;

“synthetic vision system (SVS)” means a system to display data-derived synthetic images of the external scene from the perspective of the flight deck;

“threshold time” means the range, expressed in time, established by the Authority, to an en-route alternate aerodrome, whereby any time beyond requires an extended diversion time operations (EDTO) approval from the Authority;

“total vertical error (TVE)” means the vertical geometric difference between the actual pressure altitude flown by an aircraft and its assigned pressure altitude (flight level);

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

### **3. Application of Regulations**

(1) These Regulations shall apply to the operation of all aeroplanes by operators authorized to conduct both international and domestic commercial air transport operations.

(2) Regulation 121 (3) shall apply to aeroplanes which were or are, as the case may be, first issued with certificates of airworthiness on or after the 31st day of December, 2011.

(3) Regulation 121 (4) shall apply to aeroplanes which were or are, as the case may be, first issued with certificates of airworthiness on or after the 31st day of December, 2018.

(4) Regulations 123 (2) and (4), 131, 132, 138 (1) and (3) and 208 (d) shall cease to be applicable on the 4th of November, 2020.

(5) Regulation 212 (b) shall apply to aeroplanes for which applications for type certification are submitted to Contracting States on or after 1st January 2023.

## **PART II—GENERAL**

### **4. Compliance with laws, regulations and procedures**

(1) An operator shall ensure that all its employees when abroad comply with the laws, regulations and procedures of those States in which operations are conducted.

(2) An operator shall ensure that all pilots are familiar with the laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating to these.

(3) An operator shall ensure that members of the flight crew other than pilots are familiar with the laws, regulations and procedures that are pertinent to the performance of their respective duties in the operation of the areophone.

(4) An operator or a designated representative of the operator shall have responsibility for operational control of an aeroplane.

(5) The responsibility for operational control shall be delegated only to the pilot-in-command or to a flight operations officer or flight dispatcher if the operator's approved method of control and supervision of flight operations require the use of flight operations officer or flight dispatcher personnel.

(6) When an emergency situation which endangers the safety of the aeroplane or persons becomes known first to the flight operations officer or flight dispatcher, action by that person shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.

(7) When an emergency situation which endangers the safety of the aeroplane or persons necessitates the taking of action which involves a violation of the regulations or procedures of the State in which the emergency occurs, the pilot-in-command shall notify the relevant authority of the State in which the emergency occurs, without delay.

(8) When required by the State in which the incident occurs, the pilot-in-command shall submit a report on any such violation to the appropriate authority of such State; in that event, the pilot-in-command shall also submit a copy of it to the Authority, and the reports shall be submitted within ten days.

(9) An operator shall ensure that the pilot-in-command has available on board the aeroplane all the essential information concerning the search and rescue services of the area over which the aeroplane is to be flown.

(10) An operator shall ensure that flight crew members demonstrate the ability to speak and understand the language used for radiotelephony communications as specified in the Civil Aviation Authority (Personnel Licensing) Regulations 2020.

(11) Every person and every aircraft shall comply with the Civil Aviation Authority (Rules of the Air) Regulations 2020

(12) An operator shall ensure that an aeroplane—

(a) has equipment and instruments; and

(b) has communication, navigation and surveillance equipment,

in the manner provided in the Civil Aviation Authority (Instrument and Equipment) Regulations 2020.

(13) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **5. Registration markings**

(1) A person shall not operate an aircraft registered in Uganda or a foreign-registered aircraft in Ugandan airspace, unless that aircraft displays the proper markings prescribed in the Civil Aviation Authority (Aircraft Registration and Marking) Regulations, 2020.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **6. Airworthiness and safety precautions**

(1) An operator shall develop procedures to ensure that a flight is not commenced unless—

(a) the aeroplane is airworthy, duly registered and that the appropriate certificates with respect to airworthiness are aboard the aeroplane;

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

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **7. Certificate of airworthiness**

(1) A person shall not operate an aircraft with a certificate of airworthiness except as provided in the limitations issued with that certificate in accordance with the Civil Aviation Authority (Airworthiness) Regulations, 2020.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **8. Inoperative instruments and equipment**

(1) A person shall not—

- (a) commence an aircraft flight with inoperative instruments or equipment installed, except where authorised by the Authority;

- (b) operate a multi-engine aircraft in commercial air transport with inoperative instruments and equipment installed unless the following conditions are met—
  - (i) an approved minimum equipment list (MEL) for that aircraft exists, which shall be prepared in accordance with the limitations specified in subregulation (6) and provide for the operation of the aircraft with certain instruments and equipment in an inoperative condition;
  - (ii) the Authority has issued operations specifications authorizing operations in accordance with an approved minimum equipment list (MEL);
  - (iii) the flight crew has direct access at all times prior to flight to all of the information contained in the approved minimum equipment list (MEL) through printed or other means approved by the Authority in the operations specifications which constitutes an approved change to the type design without requiring desertification;
  - (iv) records that identify the inoperative instruments and equipment and the information required by paragraph (iii) are available to the pilot; and
  - (v) the aircraft is operated under all applicable conditions and limitations contained in the minimum equipment list and the operations specifications authorising use of the minimum equipment list (MEL).

(2) Flight operations with inoperative instruments and equipment installed may be allowed in situations where no master minimum equipment list is available and no minimum equipment list is required for the specific aircraft operation under these Regulations.

(3) The inoperative instruments and equipment referred to in subregulation (2) shall not be—



- (a) part of the visual flight rules day instruments and equipment prescribed in the Civil Aviation Authority (Instruments and Equipment) Regulations, 2020.
- (b) required on the aircraft's equipment list or the operations equipment list for the kind of flight operation being conducted;
- (c) required by the Civil Aviation Authority (Instruments and Equipment) Regulations, 2020 for the specific kind of flight operation being conducted; or
- (d) required by an airworthiness directive, to be operational.

(4) The Authority may authorise a person to operate an aircraft with inoperative instruments and equipment where such instruments and equipment are—

- (a) determined by the pilot-in-command not to be a hazard to safe operation;
- (b) deactivated and placarded “Inoperative”; and
- (c) removed from the aircraft, the cockpit control placarded and the maintenance recorded in accordance with the Civil Aviation Authority (Airworthiness) Regulations, 2020.

(5) Where deactivation of the inoperative instrument or equipment involves maintenance, it shall be accomplished and recorded in accordance with the Civil Aviation Authority (Airworthiness) Regulations, 2020.

(6) The following instruments and equipment shall not be included in the minimum equipment list (MEL)—

- (a) instruments and equipment that are either specifically or otherwise required by the certification airworthiness requirements and which are essential for safe operations under all operating conditions;

- (b) instruments and equipment which are required for operable condition by an airworthiness directive, unless the airworthiness directive provides otherwise; and
- (c) instruments and equipment required for specific operations.

(7) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **9. Aircraft flight manual, marking and placard requirements**

(1) A person shall not operate an aircraft registered in Uganda unless there is available on the aircraft—

- (a) the current, approved flight manual of the aeroplane;
- (b) an operations manual approved by the Authority; and
- (c) the general operations manual describing the content and use of the operational flight plan.

(2) A person operating an aircraft under these Regulations shall display on the aircraft all placards, listings, instrument markings or a combination of these, containing the operating limitations for visual presentation, prescribed by the aircraft's State of Registry.

(3) Each aircraft flight manual (AFM) shall be updated by incorporating the requirements which are made mandatory by the State of Registry.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **10. Required aircraft and equipment**

(1) A person shall not operate an aircraft registered in Uganda unless he or she is authorised by the Authority.

(2) The aircraft referred to in sub regulation (1) shall for the purposes of the regulation have following inspections—

- (a) an annual inspection within the past twelve months;
- (b) a one hundred hour inspection;
- (c) an altimeter and pilot-static system inspection in the past twelve months;
- (d) for transponder equipped aircraft, a transponder check within the past twelve months; and
- (e) for emergency locator transmitter-equipped aircraft, an emergency locator transmitter check within the past twelve months.

(3) The aircraft for remuneration or hire operations maintained under the maintenance and inspection programme approved by the Authority, shall not be required to include current annual or one hundred hour inspections in their maintenance records.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **11. Electronic flight bag**

(1) An operator who uses an electronic flight bag on board an aircraft shall—

- (a) have it approved by the Authority;
- (b) ensure it does not affect the performance of the aircraft systems, equipment or the ability to operate the aircraft of the electronic flight bag;
- (c) assess the safety risks associated with each function;
- (d) establish and document the procedures for use of and training requirements for the device and each function; and

- (e) in the event of any failure ensure that sufficient information is readily available to the flight crew for the flight to be conducted safely.

(2) In approving the use of electronic flight bags, the Authority shall ensure that—

- (a) the electronic flight bag equipment and its associated installation hardware, including interaction with aircraft systems, if applicable, meet the appropriate airworthiness certification requirements;
- (b) an operator has assessed the safety risks associated with the operations supported by the electronic flight bag functions;
- (c) an operator has established requirements for redundancy of the information, if appropriate, contained in and displayed by the electronic flight bag functions; and
- (d) Operator has established and documented procedures for the management of the electronic flight bag functions including any database it may use and its training requirements.

## **12. Documents to be carried on aircraft**

(1) A person shall not fly an aircraft unless it carries documents which are required to be carried on board the aircraft under the law of the State of Registry.

(2) An aircraft registered in Uganda shall, when in flight, have on board the documents specified in this regulation, except that if the flight is intended to begin and end at the same aerodrome and does not include passage over the territory of any other State other than Uganda, the documents may be kept at the aerodrome instead of being carried aboard the aircraft.

(3) The documents to be carried in an aircraft for the purpose of commercial air transport are—

- (a) the licence for the aircraft radio station installed in the aircraft, in force;
- (b) the certificate of airworthiness for the aircraft, in force;
- (c) the licences and certificates of the members of the flight crew of the aircraft;
- (d) a copy of the mass and balance documentation, if any, required for the flight;
- (e) a copy of the certificate of release to service for the aircraft if any;
- (f) the technical logbook;
- (g) the operations manual;
- (h) the certificate of registration for the aircraft;
- (i) the journey logbook for the aircraft;
- (j) a list of the passenger and their points of embarkation and disembarkation;
- (k) the cargo manifest including special loads information, if applicable;
- (l) a certified true copy of the air operator certificate and operations specifications relevant to the aircraft type, issued in conjunction with the certificate;
- (m) the noise certificate, if required;
- (n) the aeroplane flight manual or rotorcraft flight manual;
- (o) the minimum equipment list;
- (p) Category II or Category III manual, as may be applicable;
- (q) the operational flight plan;

- (r) filed notice to Airmen (NOTAMS) briefing documentation;
- (s) meteorological information;
- (t) the maps and charts required for the flight and possible diversions;
- (u) forms for complying with the reporting requirements of the Authority and the air operator certificate holder's list of special situation passengers;
- (v) a list of the special situation passengers;
- (w) the filed air traffic control flight plan;
- (x) search and rescue information; and
- (y) any other document which may be required by the Authority or the States concerned with a flight.

(4) The documents to be carried in an aircraft on a flight which includes passage over a territory of any country other than Uganda for the purpose of commercial air transport and aerial work are—

- (a) the documents specified in subregulation (3);
- (b) a copy of notified procedure to be followed by the pilot in command (PIC) of an intercepted aircraft and the notified visual signals for use by intercepting and intercepted aircraft; and
- (c) a general declaration.

(5) The documents to be carried on a flight for the purpose of aerial work are—

- (a) the licence in respect of the radio station installed in the aircraft;
- (b) the certificate of airworthiness in force in respect of the aircraft;

- (c) the licences and certificates of members of the flight crew of the aircraft;
- (d) the technical logbook required by these Regulations;
- (e) one copy of the certificate of release to service, if any, in force with respect to the aircraft;
- (f) the certificate of registration of the aircraft; and
- (g) any other document required by the Authority.

(6) The documents to be carried on a flight which includes passage over a territory of any country other than Uganda for the purpose of aerial work are—

- (a) the documents specified in subregulation (5); and
- (b) a copy of the notified procedure to be followed by pilot in command of an intercepted aircraft and the notified visual signals for use by intercepting and intercepted aircraft.

(7) Where the certificate and the associated operations specifications are issued by the State of the Operator in a language other than English, an English translation shall be included.

(8) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **13. Production of documents**

(1) A pilot in command (PIC) shall, after being requested to do so by an authorized person, produce for examination by that authorised person—

- (a) the certificates of registration and airworthiness in force in respect of the aircraft;
- (b) the licences and certificates of the crew members; and

- (c) such other documents as required by regulation 12 to be on board the aircraft when in flight.

(2) An operator of an aircraft registered in Uganda shall, after being requested to do so by an authorized person, produce to that person as may be requested by Regulations—

- (a) the licence in force in respect of the aircraft radio station installed in the aircraft;
- (b) the certificate of airworthiness for the aircraft, in force;
- (c) the certificate of registration for the aircraft, in force;
- (d) the aircraft logbook, engine logbooks and variable pitch propeller logbooks required to be kept under these Regulations;
- (e) the mass and balance documentation which is, required to be preserved under these Regulations;
- (f) any records of flight time, duty periods and rest periods which are required to be preserved by these Regulations, and such other documents and information in the possession or control of the operator, required for the purpose of determining whether those records are complete and accurate;
- (g) any operations manuals or other data required to be made available under these Regulations; and
- (h) the record made by any flight recorder installed under the Civil Aviation Authority (Instrument and Equipment) Regulations, 2020.

(3) The holder of a licence or certificate granted or rendered valid under the Civil Aviation Authority (Personnel Licensing) Regulations, 2020 shall, after being requested to do so by an authorized person, produce to that authorized person, his or her licence, certificate, including any validation of the licence.



(4) Every person required by the Civil Aviation Authority (Personnel Licensing) Regulations, 2020 to keep a personal flying log-book shall—

- (a) produce it to an authorized person immediately, and in any case not later than fourteen days after being requested to do so; and
- (b) keep such records for a period of not less than two years after the date of the last entry therein.

(5) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

#### **14. Preservation of documents**

(1) Subject to subregulation (2) a person who is a natural person required by these Regulations to preserve any documents or records by reason of his or her being the operator of an aircraft shall, if he ceases to be the operator of the aircraft, continue to preserve the documents or records as if he or she had not ceased to be the operator, and in the event of his or her death the duty to preserve the documents or records shall fall upon his or her personal representative.

(2) Where—

- (a) another person becomes the operator of the aircraft, the first mentioned operator or his or her personal representative shall deliver to that person upon demand the certificate of release to service, the logbooks and the mass and balance schedule and any record made by a flight recorder and preserved in accordance with these Regulations which are in force or required to be preserved in respect of that aircraft;
- (b) an engine or variable pitch propeller is removed from the aircraft and installed in another aircraft operated by another person the first mentioned operator or his or her

personal representative shall deliver to that person upon demand the logbook relating to that engine or propeller;

- (c) any person in respect of whom a record has been kept by the first mentioned operator in accordance with these Regulations becomes a flight crew member of an aircraft registered in Uganda engaged in commercial air transport operations in Uganda and operated by another person, the first-mentioned operator or his or her personal representative shall deliver those records to that other person upon demand.

(3) It shall be the duty of the other person referred to in subregulations (2) to deal with the documents or records delivered to him or her as if he were the first mentioned operator.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **15. Insurance**

(1) A person shall not fly, or cause any other person to fly an aircraft unless there is in force an insurance policy in respect of third party risks.

(2) The insurance policy for commercial air transport aircraft shall cover insurance in respect of passenger liability and cargo, baggage and mail risks.

(3) The minimum sum of insurance in respect of any aircraft insured in accordance with subregulation (2) shall be notified by the Authority.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **16. Stowaways**

(1) A person shall not hide himself or herself in an aircraft for the purpose of being carried in the aircraft without the consent of either the operator or the pilot in command of the aircraft or of any other person entitled to give consent to his or her being carried in the aircraft.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **17. Co-ordination of activities potentially hazardous to civil aircraft**

(1) A person shall not carry out any activity which is potentially hazardous to a civil aircraft flying over Uganda or over the territorial waters of Uganda, without the approval of the Authority.

(2) Notwithstanding the general effect of subregulation (1)—

- (a) a person shall not intentionally project, or cause to be projected, a laser beam or other directed high intensity light at an aircraft in a manner that creates a hazard to aviation safety or damage to the aircraft or injury to its crew or passengers;
- (b) a person using or planning to use lasers or other directed high intensity lights outdoors in such a manner that the laser beam or other light beam may enter navigable airspace with sufficient power to cause an aviation hazard shall provide written notification to the competent authority;
- (c) a pilot in command shall not deliberately operate an aircraft into a laser beam or other directed high-intensity light unless flight safety is ensured.

(3) For the purposes of subregulation (2) (c), the agreement of the operator of the laser emitter or light source, the pilot in command and the Authority, may be required.

(4) A person shall not release into the atmosphere any radioactive material or toxic chemicals which may affect the safety of aircraft operating within Ugandan airspace.

(5) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years or both.

**18. Power to prohibit or restrict flying or landing or taking off**

(1) Where the Authority deems it necessary in the public interest to restrict or prohibit—

- (a) flying over any area of the Uganda or along any route in Uganda;
- (b) landing or take-off at any place in Uganda with the intention of gathering or the moving a large number of persons or holding an aircraft race contest or of an exhibition of flying; or
- (c) landing or take-off at any place in Uganda where this may affect the national security or public interest,

the Authority may make orders prohibiting or restricting the flight or may impose conditions on the flight by any aircraft, whether or not the aircraft is registered in Uganda, in any airspace of Uganda, and by an aircraft registered in Uganda, in any other airspace, being airspace in respect of which Uganda has in pursuance of international arrangements undertaken to provide navigation services for aircraft.

(2) An order made under this regulation may apply either generally or in relation to any class of aircraft.

(3) It shall be an offence to contravene or permit the contravention of or fail to comply with any order made under this regulation.

(4) If the pilot-in-command (PIC) becomes aware that he is flying in contravention of any regulation which have been made for

any of the reasons referred to in subregulation (1) (b) he shall, unless otherwise instructed pursuant to subregulation (5), cause the aircraft to leave the area to which the order relates by flying to the least possible extent over such area and the aircraft shall not begin to descend while over such an area.

(5) The pilot in command (PIC) flying either within an area for which orders has been made for any of the reasons referred to in subregulation (1) (b) or within airspace notified as a danger area shall forthwith comply with instructions given by radio by the appropriate air traffic services unit or by, or on behalf of, the person responsible for safety, that airspace and the area.

(6) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **19. Balloons, kites and airships**

(1) A person shall not, within Uganda—

- (a) fly a captive balloon or kite at a height of more than 200 feet above the ground level or within 200 feet of any vessel, vehicle or structure;
- (b) fly a captive balloon within an aerodrome traffic zone;
- (c) fly a balloon which exceeds 6 feet in any linear dimension at any stage of its flight, including any basket or other equipment attached to the balloon, in controlled airspace;
- (d) fly a kite within an aerodrome traffic zone;
- (e) moor an airship; or
- (f) fly a free balloon at night, without the permission in writing of the Authority, and in accordance the conditions of the permission if any.

(2) A captive balloon when in flight shall not be left unattended unless it is fitted with a device which ensures automatic deflation if it breaks.

(3) An unmanned free balloon shall be operated in such a manner as to minimize hazards to persons, property or other aircraft.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **20. Compliance by a foreign operator with laws, regulations and procedures of Uganda.**

(1) When the Authority identifies a case of non-compliance or suspected non-compliance by a foreign operator with laws and regulation applicable within Uganda, or a similar serious safety issue with a foreign operator, the Authority shall immediately notify the operator and, if the issue warrants, the State of Operator.

(2) Where the State of Operator and the State of Registry are different, the notification under subregulation (1) shall also be made to the State of Registry, if the issue is the responsibility of that State and warrants a notification.

(3) In the case of notification to States as specified in subregulations (1) and (2), if the issue and its resolution warrant it, the State in which the operation is conducted shall engage in consultations with the Authority and the State of Registry, as applicable, concerning the safety standards maintained by the operator.

## **21. Surveillance of operations by a foreign operator**

(1) The Authority shall recognize as valid an air operator certificate issued by another Contracting State, if the requirements under which the certificate was issued are at least equal to the applicable international Standards and the Civil Aviation (Commercial Air Transport Operations by Foreign Air Operators in and out of Uganda) Regulations.

(2) The Authority shall establish a programme with procedures for the surveillance of operations in Uganda by foreign operators and for taking the appropriate action, necessary to preserve safety.

(3) An operator shall meet and maintain the requirements established by the Authority.

## **22. Safety management**

(1) An operator of an aeroplane of a maximum certificated take-off mass in excess of 27 000 kg shall establish and maintain a flight data analysis programme as part of the safety management system of the operator.

(2) An operator of an aeroplane of a certificated take-off mass in excess of 20, 000 kg may establish and maintain a flight data analysis programme as part of the safety management system of the operator.

(3) An operator may contract the operation of a flight data analysis programme to another party while retaining overall responsibility for the maintenance of the programme.

(4) A flight data analysis programme shall be non-punitive and contain adequate safeguards to protect the source of the data.

(5) An operator shall establish a flight safety documents system for the use and guidance of operational personnel, as part of its safety management system.

(6) The Authority shall not allow the use of recordings or transcripts of cockpit voice recorder (CVR), CARS, Class A AIR and Class A AIRS for purposes other than the investigation of an accident or incident, except where the recordings or transcripts are—

- (a) related to a safety-related event identified in the context of a safety management system; are restricted to the relevant portions of a de-identified transcript of the recording, and are subject to the protections accorded by the Civil Aviation Authority (Safety Management Systems) Regulations, 2020;

- (b) sought for use in criminal proceedings not related to an event involving an accident or incident investigation and are subject to the protections accorded by the Civil Aviation Authority (Safety Management Systems) Regulations, 2020; or
- (c) used for inspections of flight recorder systems as provided in the Civil Aviation Authority (Instruments and Equipment) Regulations, 2020.

(7) The Authority shall not allow the use of recordings or transcripts of flight data recorder (FDR), air data recording system (ADRS) as well as Class B and Class C airborne image recorder (AIR) and airborne image recording system (AIRS) for purposes other than the investigation of an accident or incident under the relevant regulations, except where the recordings or transcripts are subject to the protections prescribed under the Civil Aviation Authority (Safety Management Systems) Regulations, 2020 and are—

- (a) used by an operator for airworthiness or maintenance purposes;
- (b) used by an operator in the operation of a flight data analysis programme required in these Regulations;
- (c) sought for use in proceedings not related to an event involving an accident or incident investigation;
- (d) de-identified; or
- (e) disclosed under secure procedures.

(8) An operator shall establish a flight safety documents system, for the use and guidance of the operational personnel, as part of its safety management system.

### **23. Imperiling the safety of persons and property.**

A person shall not willfully, recklessly or negligently cause or permit an aircraft to endanger any life or property.



## **24. Use of psychoactive substances.**

(1) A member of a flight crew shall not perform any function specified in the privileges applicable to his or her license if he or she is under the influence of any psychoactive substance which may render him or her unable to perform the functions in a safe and proper manner.

(2) A person whose function is critical to the safety of aviation shall not undertake that function while under the influence of any psychoactive substance, which impairs human performance.

(3) A person referred to in subregulation (1) and (2) shall not engage in any kind of problematic use of substances.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **25. Aircraft tracking**

(1) An operator shall establish an aircraft tracking capability to track aeroplanes throughout its area of operations.

(2) An operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion of the in-flight operation under the following conditions—

- (a) where the aeroplane has a maximum certificated take-off mass of over 27 000 kg and a seating capacity for more than 19 passengers; and
- (b) where an air traffic service (ATS) unit obtains aeroplane position information at more than 15 minute intervals.

(3) An operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion of the in-flight operation that is planned in an oceanic area under the following conditions—

- a) where the aeroplane has a maximum certificated take-off mass of over 45 500 kg and a seating capacity for more than 19 passengers; and
- b) where an air traffic service (ATS) unit obtains aeroplane position information at more than 15 minute intervals.

(4) Notwithstanding subregulations (2) and (3), the Authority may, based on the results of an approved risk assessment process implemented by the operator, allow for variations to automated reporting intervals.

(5) The risk assessment process shall demonstrate how the risks to the operation which result from any variations may be managed and shall include—

- (a) the capability of the operator's operational control systems and processes, including those for contacting air traffic service (ATS) units;
- (b) the overall capability of the aeroplane and its systems;
- (c) the available means to determine the position of, and communicate with, the aeroplane;
- (d) the frequency and duration of gaps in the automated reporting;
- (e) the human factors consequences resulting from changes to flight crew procedures; and
- (f) the specific mitigation measures and contingency procedures.

(6) An operator shall establish procedures for the retention of aircraft tracking data to assist search and rescue when determining the last known position of the aircraft, which shall be approved by the Authority.

### PART III— FLIGHT OPERATIONS

## **26. Operating facilities**

(1) An operator shall ensure that a flight is not commenced unless it is ascertained by every reasonable means available that the ground

or water facilities available and directly required on the flight, for the safe operation of the aeroplane and the protection of the passengers, are adequate for the type of operation under which the flight is to be conducted and are adequately operated for this purpose.

(2) An operator shall ensure that any inadequacy in the facilities observed in the course of operations is reported to the authority responsible for them without undue delay.

(3) Subject to their published conditions of use, aerodromes and their facilities shall be kept continuously available for flight operations during their published hours of operations, irrespective of the weather conditions.

(4) An operator shall, as part of its safety management system, assess the level of rescue and firefighting service (RFFS) protection available at any aerodrome intended to be specified in the operational flight plan in order to ensure that an acceptable level of protection is available for the aeroplane intended to be used.

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

(6) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **27. Operational certification and supervision**

(1) The issuance of an air operator certificate by the Authority shall be dependent upon an operator demonstrating adequate organisation, adequate method of control and supervision of flight operations, adequate training programme as well as adequate ground handling and maintenance arrangements consistent with the nature and extent of the operations specified.

(2) An operator shall develop policies and procedures for the third parties that perform work on its behalf.

## **28. Air operator certificate**

(1) An operator shall not engage in commercial air transport operations unless the operator is in possession of a valid air operator certificate issued by the Authority.

(2) The air operator certificate shall authorize an operator to conduct commercial air transport operations in accordance with the operations specifications.

(3) The validity of an air operator certificate shall depend upon an operator fulfilling the requirements in regulation 10 under the supervision of the Authority.

(4) The air operator certificate shall be in the format in the First Schedule of the Civil Aviation Authority (Air Operator Certification and Administration) Regulations, 2020 and shall contain at least the following information—

- (a) the issuing authority;
- (b) the air operator certificate number and its expiration date;
- (c) the operator name, trading name (if different) and address of the principal place of business;
- (d) the date of issue and the name, signature and title of the authority representative; and
- (e) the location, in a controlled document carried on board, where the contact details of operational management can be found.

(5) The operations specifications associated with the air operator certificate shall be in format in the Second Schedule of the Civil Aviation (Air Operator Certification and Administration) Regulations, 2020 and shall contain at least the following information

---

- (a) each aircraft model in the operator's fleet, identified by aircraft make, model and series, the list of authorizations, conditions and limitations shall be included;
- (b) the issuing authority contact details;
- (c) the operator name and air operator certificate (AOC) number;
- (d) the date of issue and signature of the authority representative;
- (e) the aircraft model, types and area of operations; and
- (f) the special limitations and authorizations.

(6) The Authority shall establish a system for both the certification and the continued surveillance of an operator using the Civil Aviation Authority (Safety Management) Regulations, 2020 to ensure that the required standards of operations established in this regulation are maintained.

## **29. Surveillance of operations by a foreign operator**

(1) The Authority shall recognize as valid an air operator certificate issued by another Contracting State, provided that the standards under which the certificate was issued are at least equal to the standards specified in these Regulations and in the Civil Aviation Authority (Safety Management Systems) Regulations, 2020.

(2) The Authority shall establish a programme with procedures for the surveillance of operations in Uganda by a foreign operator and for taking appropriate action when necessary to preserve safety.

(3) The foreign operator shall meet and maintain the requirements established by the Authority, for operations conducted in Uganda.

## **30. Operations manual**

(1) An operator shall provide, for the use and for the guidance of the operations personnel concerned, an operation manual which shall

be as described in the Third Schedule of the Civil Aviation Authority (Air Operator Certification and Administration) Regulations 2020.

(2) The operations manual shall be amended or revised as necessary to ensure that the information contained in the manual is kept up to date.

(3) All amendments or revisions shall be issued to all personnel that are required to use the manual.

(4) The Authority shall establish a requirement for an operator to provide a copy of the operations manual together with all amendments and revisions, for review, acceptance and where required, approval.

(5) An operator shall incorporate in the operations manual the mandatory information as the Authority may require.

### **31. Operating instructions - general**

(1) An operator shall ensure that all operations personnel are properly instructed in their particular duties and responsibilities and the relationship of their duties to the operation as a whole.

(2) An aeroplane shall not be taxied on the movement area of an aerodrome unless the person at the controls—

- (a) is duly authorized by the operator or a designated agent;
- (b) is fully competent to taxi the aeroplane;
- (c) is qualified to use the radiotelephone; and
- (d) receives instruction from a competent person in respect of aerodrome layout, routes, signs, marking, lights, air traffic control (ATC) signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aeroplane movement at the aerodrome.

(3) An operator shall issue operating instructions and provide information on aeroplane climb performance with all engines operating to enable the pilot-in-command to determine the climb gradient that

can be achieved during the departure phase for the existing take-off conditions and intended take-off technique and this information shall be included in the operations manual.

### **32. In-flight simulation of emergency situations**

An operator shall ensure that when passengers or cargo are being carried, no emergency or abnormal situations are simulated.

### **33. Checklists**

(1) The normal, abnormal and emergency procedures checklists shall be used by flight crews prior to, during and after all phases of operations, and in an emergency, to ensure compliance with the operating procedures contained in the aircraft operating manual and the aeroplane flight manual or other documents associated with the certificate of airworthiness and in the in the operations manual.

(2) The design and utilization of checklists shall observe human factors principles.

### **34. Altimeter settings.**

A person operating an aircraft registered in Uganda shall set the aircraft altimeters to maintain the cruising altitude for flight level reference in accordance with the procedure notified by—

- (a) the State where the aircraft may be; or
- (b) the Aeronautical Information Publication.

### **35. Operation of radio in aircraft**

(1) The radio station in an aircraft shall not be operated, whether or not the aircraft is in flight, except in accordance with the conditions of the licence issued in respect of that station under the law of the State of Registry, and by a person duly licensed or permitted to operate the radio station under that law.

(2) Subject to subregulations (3) and (4) whenever an aircraft is in flight in circumstances in which it is required by or under these Regulations to be equipped with radio communications apparatus, a continuous radio watch shall be maintained by a member of a flight crew also shall listen to the signals transmitted upon the frequency notified or designated by a message received from an appropriate aeronautical radio station, for use by that aircraft.

(3) The radio watch may be discontinued or continued on another frequency to the extent that a message in subregulation (2) permits.

(4) The watch may be kept by a device installed in the aircraft if the appropriate aeronautical radio station has been so informed and has raised no objection; or in the case of a station situated in a State other than Uganda, otherwise designated as transmitting a signal suitable for that purpose.

(5) Whenever an aircraft is in flight in such circumstances that it is required by or under these Regulations to be equipped with radio or radio navigation equipment, a member of the flight crew shall operate that equipment in such a manner as he or she may be instructed by the appropriate air traffic control unit or as may be notified, in relation to the airspace in which the aircraft is flying.

(6) The radio station in an aircraft shall not be operated so as to cause interference, that impairs the efficiency of aeronautical telecommunications or navigational services, and in particular emissions shall not be made except as follows—

- (a) emission of the class and frequency for the time being in use, in accordance with general international aeronautical practice, in the airspace in which the aircraft is flying;
- (b) distress, urgency and safety messages and signals, in accordance with general international aeronautical practice;



- (c) messages and signals relating to the flight of the aircraft, in accordance with general international aeronautical practice; and
- (d) public correspondence messages which may be permitted by or under the aircraft radio station licence.

(7) In any aircraft registered in Uganda, under these Regulations, the pilot and the flight engineer, if any, shall not make use of a hand-held microphone, whether for the purpose of radio communication or of intercommunication within the aircraft, whilst the aircraft is flying in controlled airspace below flight level 150 or is taking off or landing.

(8) An aircraft which is equipped with a radio station having a defect which impairs the safety of the aircraft shall not undertake any flight until the aircraft is rendered safe, or if such defect occurs during flight, shall land as soon as possible unless the radio station can be and is speedily rendered safe for flight.

### **36. Minimum flight altitudes**

(1) An operator shall be permitted to establish minimum flight altitudes for those routes for which minimum flight altitudes have been established by the State flown over or a responsible State, provided that they shall not be less than those established by that State.

(2) An operator shall specify the method to be used to determine the minimum flight altitudes for the operations which are conducted over routes for which minimum flight altitudes have not been established by the State flown over or the responsible State, and shall include the method in the operations manual.

(3) The minimum flight altitudes shall not be lower than specified in the Civil Aviation Authority (Rules of the Air) Regulations, 2020.

(4) The method for establishing the minimum flight altitudes shall be approved by the Authority.

(5) The Authority shall approve the minimum flight altitudes method after consideration of the probable effects of the following factors on the safety of the operation—

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

### **37. Aerodrome operating minima**

(1) The Authority shall require an operator to establish an aerodrome operating minima for each aerodrome to be used in operations.

(2) The Authority shall approve the method of determination of the aerodrome operating minima.

(3) The minima shall not be lower than the manima that may be established for such aerodromes by the State of the Aerodrome, except when specifically approved by that State.

(4) The Authority may approve operational credit for operations with aeroplanes equipped with automatic landing systems, a head up display (HUD) or equivalent displays, enhanced vision systems (EVS), synthetic vision systems (SVS) or combined vision systems (CVS).

(5) The Authority shall ensure that operational credit approved, do not affect the classification of the instrument approach procedure.

(6) For the purpose of this regulation “operational credit” includes—

- (a) for the purposes of an approach ban, a minima below the aerodrome operating minima;
- (b) reducing or satisfying the visibility requirements; or
- (c) requiring fewer ground facilities as compensated for by airborne capabilities.

(7) The Authority shall require that in establishing the aerodrome operating minima to apply to any particular operation, full account is taken of—

- (a) the type, performance and handling characteristics of the aeroplane;
- (b) the composition of the flight crew, their competence and experience;
- (c) the dimensions and characteristics of the runways which may be selected for use;
- (d) the adequacy and performance of the available visual and non-visual ground aids;
- (e) the equipment available on the aeroplane for the purpose of navigation, acquisition of visual references and control of the flight path during the approach, landing and the missed approach;
- (f) the obstacles in the approach and missed approach areas and the obstacle clearance altitude or height for the instrument approach procedures;
- (g) the means used to determine and report meteorological conditions; and
- (h) the obstacles in the climb-out areas and necessary clearance margins.

(8) Instrument approach operations shall be classified based on the designed lowest operating minima below which an approach operation shall only be continued with the required visual reference as follows—

- (a) Type A, a minimum descent height or decision height at or above 75 m (250 ft.); and
- (b) Type B, a decision height below 75 m (250 ft.) categorised as follows—
  - (i) Category I, a decision height not lower than 60 m (200 ft.) and with either a visibility which shall be not less than 800 m or a runway visual range which shall be not less than 550 m;
  - (ii) Category II, a decision height which shall be lower than 60 m (200 ft.) but not lower than 30 m (100 ft.) and a runway visual range which shall be not less than 300 m;
  - (iii) Category IIIA, a decision height which shall be lower than 30 m (100 ft.) or no decision height and a runway visual range which shall be not less than 175 m;
  - (iv) Category IIIB, a decision height which shall be lower than 15 m (50 ft.) or no decision height and a runway visual range which shall be less than 175 m but not less than 50 m; and
  - (v) Category IIIC, no decision height and no runway visual range limitations.

(9) Category II and Category III of type B instrument approach operations shall not be authorized unless runway visual range (RVR) information is provided.

(10) For instrument approach operations, aerodrome operating minima below 800 m visibility shall not be authorized unless runway visual range (RVR) information is provided.

(11) 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, the cloud conditions.

(12) 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.

### **38. Category II and Category III operations- general operating rules**

(1) A person shall not operate an aircraft in a Category II or Category III operations unless—

- (a) the pilot-in-command and co-pilot of the aircraft hold the appropriate authorisations and ratings prescribed in the **Civil Aviation (Personnel Licensing) Regulations 2020**;
- (b) each flight crew member has adequate knowledge of, and familiarity with, the aircraft and the procedures to be used; and
- (c) the instrument panel used by the pilot who controls the aircraft has appropriate instrumentation for the type of flight control guidance system that is being used.

(2) Unless otherwise authorised by the Authority, a person shall not operate an aircraft in a Category II or Category III unless each ground component required for that operation and the related airborne equipment is installed and operating.

(3) Where the approach procedure used provides for and requires the use of a decision height or decision altitude, the authorised decision height or decision altitude is the highest of the following-

- (a) the decision height or decision altitude prescribed by the approach procedure;
- (b) the decision height or decision altitude prescribed for the pilot in command; or

- (c) the decision height or decision altitude for which the aircraft is equipped.

(4) Unless otherwise authorised by the Authority, a pilot operating an aircraft in a Category II or Category III approach that provides and requires use of a decision height or decision altitude shall not continue the approach below the authorised decision height unless—

- (a) the aircraft is in a position from which a descent to a landing on the intended runway may be made at a normal rate of descent using normal manoeuvres, and where that descent rate allows touchdown to occur within the touchdown zone of the runway of intended landing;
- (b) 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 shall not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable;
  - (ii) the threshold or the threshold markings;
  - (iii) the threshold lights;
  - (iv) the touchdown zone or touchdown zone markings; and
  - (v) the touchdown zone lights.

(5) Unless otherwise authorised by the Authority, a pilot operating an aircraft shall immediately execute an appropriate missed approach procedure whenever, prior to touchdown, the requirements of subregulation (4) are not met.

(6) A person operating an aircraft using a Category III approach without decision height shall not land that aircraft except in accordance with the provisions of the letter of authorisation issued by the Authority.

(7) Sub regulations (1), (2), (3), (4), (5) and (6) do not apply to operations conducted by air operator certificate AOC holders issued with a certificate under the **Civil Aviation (Air Operator Certification and Administration) Regulations, 2020**.

(8) A person shall not operate an aircraft in a Category II or Category III where the operation is conducted by an air operator certificate (AOC) holder, unless the operation is conducted in accordance with that air operator certificate (AOC) holder's specific operations specifications.

### **39. Category II and Category III- operations manual**

(1) Except as provided in subregulation (3), a person shall not operate an aircraft in a Category II or a Category III operation unless-

- (a) there is available on the aircraft the appropriate Category II or Category III manual, as appropriate, for that aircraft;
- (b) the operation is conducted in accordance with the procedures, instructions, and limitations in the manual; and
- (c) the instruments and equipment listed in the manual that are required for a particular operation have been inspected and maintained in accordance with the maintenance programme contained in the manual.

(2) An operator shall keep a copy of each manual at its principal base of operations and shall make each manual available for inspection upon request by the Authority.

(3) Subregulations (1) and (2) do not apply to operations conducted by an air operator certificate holder issued under the **Civil Aviation (Air Operator Certification and Administration) Regulations, 2020**.

(4) An applicant who applied for approval of a Category II or Category III operations manual or for amendment of an approved

Category II operations manual shall submit the proposed manual or amendment to the Authority.

(5) Where an application made under these Regulations is for a request for an evaluation programme, the application shall include the following—

- (a) the location of the aircraft and the place where the demonstrations are to be conducted; and
- (b) the date the demonstrations are to commence which shall be at least 10 days after filing the application.

(6) A Category II and Category III operations manual shall contain—

- (a) the registration number, make, and model of the aircraft to which it applies;
- (b) a maintenance programme; and
- (c) the procedures and instructions related to—
  - (i) the recognition of decision height or decision altitude;
  - (ii) the use of runway visual range information;
  - (iii) approach monitoring;
  - (iv) the decision region, which is the region between the middle marker and the decision height or decision altitude;
  - (v) the maximum permissible deviations of the basic instrument landing system indicator within the decision region;
  - (vi) a missed approach procedure;
  - (vii) use of airborne low approach equipment;
  - (viii) the minimum altitude for the use of the autopilot;
  - (ix) instrument and equipment failure warning systems;
  - (x) instrument failure; and



- (xi) other procedures, instructions, and limitations as the Authority may deem necessary.

#### **40. Threshold crossing height for 3D instrument approach operations**

(1) An operator shall establish operational procedures designed to ensure that an aeroplane being used to conduct 3D instrument approach operations crosses the threshold by a safe margin, with the aeroplane in the landing configuration and attitude.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

#### **41. Fuel and oil records**

(1) An operator shall maintain fuel records in accordance with the requirements of regulations 30 and 31.

(2) An operator shall maintain oil records to enable the Authority ascertain that the trends for oil consumption are such that an aeroplane has sufficient oil to complete each flight.

(3) The fuel and oil records shall be retained by an operator for a period of three months.

#### **42. Crew- pilot in command (PIC)**

(1) An operator shall, for each flight, designate one pilot to act as pilot-in-command.

(2) For each flight of an aeroplane above 15 000 m (49 000 ft.), an operator shall maintain records to determine the total cosmic radiation dose received by each crew member over a period of 12 consecutive months.

#### **43. Pre-flight action**

(1) A pilot-in-command of an aircraft registered in Uganda shall before the flight is commenced satisfy himself or herself that—

- (a) the flight can safely be made, taking into account the latest information available as to the route and aerodromes to be used, the weather reports and forecasts available, and any alternative cause of action which can be adopted in case the flight cannot be completed as planned;
- (b) that the equipment, including radio apparatus, required by these Regulations to be carried is carried and is in a fit condition for use;
- (c) that the aircraft is in every way fit for the intended flight, and that, where a certificate of release to service is required by the **Civil Aviation (Airworthiness) Regulations 2020**, to be in force, the certificate is in force and will not cease to be in force during the intended flight;
- (d) that the load carried by the aircraft is of such weight, and is so distributed and secured, that it may safely be carried on the intended flight.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

#### **44. Loading of aircraft**

(1) An air operator certificate (AOC) holder shall not cause or permit an aircraft to be loaded for a flight for the purpose of commercial air transport except under the supervision of a person who the air operator certificate (AOC) holder has caused to be furnished with written instructions as to the distribution and securing of the load so as to ensure that—

- (a) the load may safely be carried on the flight; and
- (b) any condition subject to which the certificate of airworthiness in force in respect of the aircraft was issued or rendered valid, being conditions relating to the loading of the aircraft are complied with.

(2) The instructions shall indicate the mass of the aircraft prepared for service, that is, the aggregate of the basic mass and the mass of such additional items in or on the aircraft as the operator thinks fit to include, and the instructions shall indicate the additional items included in the mass of the aircraft prepared for service, and shall show the position of the centre of gravity of the aircraft at that mass.

(3) Subregulation (2) shall not apply to a flight where—

- (a) the authorized maximum take-off mass of an aircraft does not exceed 1150 kg; or
- (b) the aircraft's authorized maximum take-off mass does not exceed 2730 kg. for a flight which is not intended to exceed sixty minutes in duration and is either a flight—
  - (i) solely for training persons to perform duties in an aircraft; or
  - (ii) intended to begin and end at the same aerodrome.

(4) An operator of an aircraft shall not cause or permit the aircraft to be loaded in contravention of the instructions set out in subregulation (1).

(5) A person supervising the loading of the aircraft shall, before the commencement of a flight—

- (a) prepare and sign a load sheet in duplicate conforming to the requirements specified in subregulation (7); and
- (b) unless the operator is the pilot-in-command (PIC) of the aircraft, submit the load sheet for examination by the pilot in command (PIC) of the aircraft who shall, upon being satisfied that the aircraft is loaded in the manner required by subregulation (1), sign his or her name on the load sheet;

(6) The requirements of subregulation (5) shall not apply—

- (a) where the load and the distribution and securing of the load upon the next intended flight are to be unchanged from the flight and the pilot in command (PIC) of the aircraft makes and signs an endorsement to that effect upon the load sheet for the flight, indicating the date of the endorsement, the place of departure upon the next intended flight and the next intended destination; or
- (b) to a flight to which subregulation (3) applies.

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

(8) A load sheet required under subregulation (5) shall contain the following information—

- (a) the nationality and registration marks of the aircraft to which the load sheet relates;
- (b) particulars of the flight to which the load sheet relates;
- (c) the total mass of the aircraft as loaded for the flight;
- (d) the mass of the several items from which the total mass of the aircraft, as so loaded, has been calculated including in particular the mass of the aircraft prepared for service and the respective total mass of the passengers, crew, baggage and cargo intended to be carried on the flight;
- (e) the manner in which the load is distributed and the resulting position of the centre of gravity of the aircraft which may be given approximately if and to the extent that the relevant certificate of airworthiness so permits; and
- (f) at the end of the load sheet, a certificate signed by the person referenced in subregulation (1) as responsible for the loading of the aircraft, stating that the aircraft has

been loaded in accordance with the written instructions furnished to him or her by the operator of the aircraft pursuant to that subregulation.

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

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

(11) An operator shall compute the mass of passengers and checked baggage using the standard mass values specified in Tables 1 and 2 except where the number of passenger seats is less than 10.

(12) The standard mass includes the mass of hand baggage and the mass of any infant below two years of age carried by an adult on one passenger seat and infants who occupy separate passenger seats shall be considered as children for the purpose of this regulation.

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

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

(15) On flights where no hand baggage is carried in the cabin or where hand baggage is accounted for separately, 6 kg may be deducted from the male and female masses in Table 1 and articles such as overcoats, umbrellas, small handbags or purses, reading material and

small cameras are not considered as hand baggage for the purpose of this regulation.

TABLE 1 - COMPUTATION OF MASS OF PASSENGERS

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

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

TABLE 2

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

(17) The load sheet shall bear a notation to that effect where sub regulations (10), (11) or (13) is applied.

(18) Where subregulations (10), (11), (13) and (15) apply, the pilot in command (PIC) shall, if the standard masses described in subregulation 10 appear to be inapplicable or doing so is in the interests of safety of the aircraft, require any or all of the passengers,

crew and cargo to actually be weighed for the purpose of the entry to be made in the load sheet.

(19) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

#### **45. Stowage of baggage and cargo**

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

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

(3) The procedure referred to in subregulation (2) shall provide that—

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

- (f) baggage and cargo shall not be placed where it can impede access to emergency equipment; and
- (g) checks shall be made before take-off, before landing and whenever the fasten seat belts signs are illuminated or it is otherwise so ordered to ensure that baggage is stowed where it cannot impede evacuation from the aircraft or cause injury by falling or other movement, as may be appropriate to the phase of flight.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

#### **46. Passengers**

(1) An operator shall ensure that passengers are made familiar with the location and use of—

- (a) seat belts;
- (b) emergency exits;
- (c) life jackets, if the carriage of life jackets is prescribed;
- (d) oxygen dispensing equipment, if the provision of oxygen for the use of passengers is prescribed; and
- (e) other emergency equipment provided for individual use, including passenger emergency briefing cards.

(2) An operator shall inform the passengers of the location and general manner of use of the principal emergency equipment carried for collective use.

(3) An operator shall ensure that in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.

(4) An operator shall ensure that, during take-off and landing and whenever considered necessary by reason of turbulence or any emergency occurring during flight, all passengers on board an



aeroplane are secured in their seats by means of the seat belts or harnesses provided.

#### **47. Required passenger briefings**

(1) A person shall not commence a take-off unless the passengers are briefed prior to take-off in accordance with the air operator certificate (AOC) holder's operations manual on—

- (a) smoking limitations and prohibitions;
- (b) emergency exit location and use;
- (c) use of safety belts;
- (d) emergency floatation means location and use;
- (e) the location and general manner of use of the principal emergency equipment for collective use;
- (f) the fire extinguisher location and operation;
- (g) the placement of seat backs;
- (h) if a flight is above 12,000 feet above mean sea level, the normal and emergency use of oxygen; and
- (i) the passenger briefing card.

(2) The pilot in command (PIC) shall immediately before or after turning the seat belt sign off, ensure that the passengers are advised to keep their seat belts fastened while seated, even when the seat belt sign is off.

(3) The pilot in command (PIC) shall, before take-off, ensure that persons of reduced mobility are personally advised on the -

- (a) route to the most appropriate exit; and
- (b) time to begin moving to the exit in the event of an emergency.

(4) The pilot in command (PIC) operating a commercial air transport operations flight shall ensure that the briefing specified

in this regulation contains all the objects approved for the specific operations conducted as included in the relevant operations manual.

(5) An operator shall ensure that during take-off and landing and whenever, by reason of turbulence or any emergency occurring during flight the precaution is considered necessary, all passengers on board an aeroplane are secured in their seats by means of seat belts or harnesses provided.

(6) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

#### **48. Carriage of persons with reduced mobility**

(1) A person shall not allow a person of reduced mobility to occupy seats where his or her presence may—

- (a) impede the crew in their duties;
- (b) obstruct access to emergency equipment; or
- (c) impede the emergency evacuation of the aircraft.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

#### **49. Exit row seating**

(1) A pilot in command (PIC) shall ensure that no passenger sits in an emergency exit row if the pilot in command (PIC) determines that it is likely that the passenger would not be able to understand and perform the functions necessary to open an exit and to exit rapidly.

(2) A pilot in command (PIC) shall ensure that a person is not seated in a passenger exit seat if it is likely that the person would not be able to perform the following functions—

- (a) lacks sufficient mobility, strength, or dexterity in both arms and hands, or in legs to—

- (i) reach upward, sideways, and downward to the location of emergency exit and exit-slide operating mechanisms;
  - (ii) grasp and push, pull, turn, or otherwise manipulate those mechanisms;
  - (iii) push, shove, pull, or otherwise open emergency exits;
  - (iv) lift out, hold, deposit on nearby seats, or manoeuvre over the seatbacks to the next row objects the size and weight of overwing window exit doors;
  - (v) remove obstructions of size and weight similar overwing exit doors;
  - (vi) reach the emergency exit expeditiously;
  - (vii) maintain balance while removing obstructions;
  - (viii) exit expeditiously;
  - (ix) stabilise an escape slide after deployment; or
  - (x) assist others in getting off an escape slide;
- (b) is less than fifteen years of age or lacks the capacity to perform one or more of the functions specified in this regulation without assistance;
  - (c) lacks the ability to read and understand the instructions required by this regulation and related to emergency evacuation provided by the air operator certificate (AOC) holder in printed or graphic form or the ability to understand oral crew commands;
  - (d) lacks sufficient visual capacity to perform one or more of the functions specified in paragraphs (a) (b) and (c) without the assistance of visual aids beyond contact lenses or eyeglasses;
  - (e) lacks sufficient aural capacity to hear and understand instructions given by cabin crew members, without assistance beyond a hearing aid;

- (f) lacks the ability to adequately impart information orally to other passengers; or
- (g) has a condition or responsibilities, such as caring for small children, that might prevent the person from performing one or more of the functions in this regulation or a condition that might cause the person harm if he or she performs one or more of these functions.

(3) The determination of the suitability of a person permitted to occupy an exit seat shall be made by the cabin crew members.

(4) Where a cabin crew member determines that a passenger assigned to an exit seat would be unable to perform the emergency exit functions, or if a passenger requests a non-exit seat, the cabin crew member shall expeditiously relocate the passenger to a non-exit seat.

(5) In the event of full booking in the non-exit seats, and if necessary to accommodate a passenger being relocated from an exit seat, the cabin crew member shall move a passenger who is willing and able to assume the evacuation functions, to an exit seat.

(6) An air operator certificate (AOC) holder shall ensure that a ticket agent—

- (a) to the maximum extent feasible, assigns seats consistent with the passenger selection criteria and the emergency exit functions, prior to boarding; and
- (b) makes available for inspection by the public at all passenger loading gates and ticket counters at each aerodrome where it conducts passenger operations, written procedures established for making determinations for exit row seating.

(7) A cabin crew member shall include in the passenger briefings—

- (a) a request for a passenger to identify himself or herself so as to allow reseating where the passenger—

- (i) does not meet the selection criteria;
  - (ii) has a non-discernible condition that prevents the passengers from performing the evacuation functions;
  - (iii) may suffer bodily harm as the result of performing one or more of the evacuation functions; or
  - (iv) does not wish to perform emergency exit functions;
- (b) a reference to the passenger information cards and the functions to be performed in an emergency.

(8) A passenger shall comply with instructions given by a crew member or other authorised employee of the air operator certificate (AOC) holder implementing exit seating restrictions.

(9) A pilot in command (PIC) shall not allow taxi or pushback of an aircraft unless at least one required crew member has verified that all the exit rows and escape paths are unobstructed and that no exit seat is occupied by a person the crew member determines is likely to be unable to perform the applicable evacuation functions.

(10) In order to comply with this regulation an air operator certificate (AOC) holder shall—

- (a) establish procedures that comply with the requirements of this regulation; and
- (b) submit the procedures, to the Authority, for preliminary review and approval.

(11) The procedures required by this regulation shall not become effective until the procedures are approved by the Authority, and approval shall be based solely upon the safety aspects of the air operator certificate (AOC) holder's procedures.

## **50. Passenger seatbelts.**

(1) A passenger occupying a seat or berth shall fasten his or her safety belt and keep it fastened while the seat belt sign is lighted and

where an aircraft is not equipped with a seat belt sign, whenever so instructed by a pilot-in-command.

(2) A passenger safety belt shall not be used by more than one occupant during take-off and landing.

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

(4) A person who is not two years of age may be held by an adult who is occupying a seat or berth.

(5) A berth, such as a multiple lounge or divan seat, may be occupied by two persons provided it is equipped with an approved safety belt for each person and is used during en route flight only.

## **51. Passenger seat backs.**

(1) A pilot-in-command shall not allow the take-off or landing of an aircraft unless each passenger seat back is in the upright position.

(2) Exceptions to the requirement of subregulations (1) may be made and where it is made, it shall only be made in accordance with procedures in the air operator certificate holder's operations manual and provided the seat back does not obstruct any passenger's access to the aisle or to any emergency exit.

## **52. Stowage of food and beverage for passenger service**

A pilot-in-command shall not allow the movement of an aircraft on the surface, for take-off or landing—

- (a) when any food, beverage or tableware furnished by the air operator certificate holder is located at any passenger seat; or
- (b) unless each food and beverage tray and seat back tray table is in the stowed position.

### **53. Securing of items of mass in passenger compartment**

A person shall not allow—

- (a) the take-off 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, take-off and landing and during turbulent weather conditions; or
- (b) an aircraft to move on the surface, take-off or land unless each passenger serving cart is secured in its stowed position.

### **54. Unacceptable conduct**

(1) A person on board an aircraft shall not—

- (a) interfere, with a crew member in the performance of that crew members duties;
- (b) refuse to fasten his or her seat belt and to keep it fastened while the seat belt sign is lighted;
- (c) wilfully, recklessly or negligently act or omit to act—
  - (i) so as to endanger the aircraft or persons and property on the aircraft; or
  - (ii) so as to cause or permit an aeroplane to endanger any person or property;
- (d) secrete himself or herself nor secrete cargo on board an aircraft;
- (e) smoke while the no-smoking sign is lighted;
- (f) smoke in any lavatory of an aircraft;
- (g) tamper with, disable or destroy any smoke detector installed in any aircraft lavatory; or
- (h) willfully, recklessly or negligently imperil the safety of an aircraft or any person on board, whether by interference with any crew member, or by tampering with the aircraft or its equipment, or by disorderly conduct by any other means.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **55. Alcohol or drugs**

(1) An officer in charge shall not permit any person who appears to be intoxicated or who demonstrates, by manner or physical indications, that that person is intoxicated to—

- (a) board an aircraft; or
- (b) be served alcohol, while on board the aircraft.

(2) A person shall not—

- (a) board an aircraft while intoxicated or under the influence of drugs; or
- (b) while on board the aircraft, be intoxicated or under the influence of drugs.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **56. Carriage of munitions of war**

(1) An aircraft shall not carry munitions of war.

(2) A person shall not take or cause to be taken on board an aircraft, or deliver or cause to be delivered for carriage on an aircraft, any goods which that person knows or has reason to believe or suspect to be munitions of war.

(3) Without prejudice to subregulations (1) and (2), a person shall not carry or have in his or her charge any weapon on board an aircraft registered in Uganda, provided that a weapon, not being munitions of war, may be carried as passenger's baggage if it is stowed in the part of the aircraft which is inaccessible to passengers and, in the case of a firearm, the firearm is not loaded.



(4) Nothing in this regulation shall apply to weapons or ammunition taken or carried on board an aircraft if the weapons or ammunition may, under the law of the State in which the aircraft is registered, be lawfully taken or carried on board for the purpose of ensuring the safety of the aircraft or of the persons on board.

(5) For the purpose of this regulation, “munitions of war” means such weapons, ammunition, articles, materials or devices as are intended or adapted for use in warfare.

(6) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **57. Prohibition against carriage of weapons**

(1) A person shall not, while on board an aircraft used for commercial air transport operation, carry a deadly or dangerous weapon, either concealed or unconcealed.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **58. Least-risk bomb location and stowage of weapons**

(1) A State of design, shall provide for use, at the least-risk bomb location, specialized means of attenuating and directing a blast.

(2) Where an operator accepts the carriage of weapons which are removed from passengers, the weapons shall be stowed in a place which is not accessible to any other person during flight time.

## **59. Passenger compliance with instructions**

(1) A passenger on a commercial air transport operation flight shall comply with the instructions given by a crew member under these Regulations.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **60. Denial of transportation**

An air operator certificate holder may deny transportation of a passenger who—

- (a) refuses to comply with the instructions regarding exit seating restrictions prescribed by the these Regulations; or
- (b) has a handicap that if it is to be physically accommodated, causes obstruction to the safe evacuation of other passengers from the aircraft as provided for in Regulation 49.

## **61. Passenger information signs**

A pilot in command (PIC) of an aircraft shall turn on the required passenger information signs during any movement on the surface, for each take-off and each landing, and whenever considered necessary.

## **62. Carriage of persons without compliance with passenger-carrying requirements**

(1) A pilot-in-command or an operator shall not allow a person to be carried without complying with the requirements for carrying the passenger unless there is an approved seat with an approved seat belt for that person, and—

- (a) the seat is so located that the occupant is not in any position to interfere with the flight crew members performing their duties;
- (b) there is unobstructed access from the approved seat to the flight deck and to a regular or emergency exit;
- (c) there is means for notifying that person when smoking is prohibited and when seat belts shall be fastened; and
- (d) that person has been orally briefed by a crew member on the use of emergency equipment and exits.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **63. Evacuation capability**

(1) A pilot in command (PIC) or other person assigned by the air operator certificate holder shall ensure that, when passengers are on board the aircraft prior to movement on the surface, at least one floor-level exit provides for the egress of passengers through normal or emergency means.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **64. Flight preparation**

(1) A flight shall not be commenced until flight preparation forms are completed and the forms shall certify that the pilot-in-command is satisfied that—

- (a) the aeroplane is airworthy and the appropriate certificates including airworthiness, registration certificates are on board the aeroplane;
- (b) the instruments and equipment prescribed in these regulations for the particular type of operation to be undertaken, are installed and are sufficient for the flight;
- (c) a maintenance release as prescribed in the **Civil Aviation (Air Operator Certification and Administration) Regulations 2020** has been issued in respect of the aeroplane;
- (d) the mass of the aeroplane and center of gravity location are such that the flight can be conducted safely, taking into account the expected flight conditions;
- (e) any load carried is properly distributed and safely secured;
- (f) a check has been completed indicating that the operating limitations of these regulations can be complied with for the flight to be undertaken; and

(g) the requirements in regulation 43 have been complied with.

(2) Completed flight preparation forms shall be kept by an operator for a period of three months.

## **65. Operational flight planning**

(1) An operational flight plan shall be completed for every intended flight.

(2) The operational flight plan shall be approved and signed by the pilot-in-command and, where applicable, signed by the flight operations officer or flight dispatcher, and a copy shall be filed with an operator or a designated agent, or, if these procedures are not possible, the plan shall be left with the aerodrome authority or on record in a suitable place at the point of departure.

(3) The operations manual shall describe the content and use of the operational flight plan.

## **66. En-route limitations- all engines operating**

(1) A person shall not commence a flight in a reciprocating engine powered aeroplane at a weight that does not allow a rate of climb of at least 6.9 V<sub>so</sub> with all engines operating, at an altitude of at least 300 m (1,000 ft.) above all terrain and obstructions within ten miles of each side of the intended track.

(2) In this regulation “6.9 V<sub>so</sub>” means the number of feet per minute obtained by multiplying the aircraft’s minimum steady flight speed by 6.9.

## **67. En-route limitations- one engine inoperative**

(1) An operator shall ensure that the one engine which is inoperative en-route net flight path data shown in the aeroplane flight manual, is appropriate to the meteorological conditions expected for the flight and complies with either subregulation (2) or (3) at all points along the route.

(2) The net flight path shall have a positive gradient at 1500 ft. above the aerodrome where the landing is assumed to be made after engine failure, in meteorological conditions which require the operation of ice protection systems and the effect of their use on the net flight path must be taken into account.

(3) The gradient of the net flight path shall be positive at least 1000 ft. above all terrain and obstructions along the route within 9.3 km (5 nm) on either side of the intended track.

(4) The net flight path shall permit the aeroplane to continue flight from the cruise altitude to an aerodrome where a landing can be made in accordance with regulation 145 as appropriate, and the net flight path clearing vertically by at least 2000 ft., all terrain and obstructions along the route within 9.3 km (5 nm) on either side of the intended track in accordance with the following conditions -

- (a) the engine is assumed to fail at the most critical point along the route;
- (b) account is taken of the effects of winds on the flight path;
- (c) fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used; and
- (d) the aerodrome where the aeroplane is assumed to land after engine failure meets the following criteria—
  - (i) the aerodrome meets the performance requirements at the expected landing mass; and
  - (ii) the aerodrome weather reports or forecasts or any combination of these, and field condition reports indicate that a safe landing can be accomplished at the estimated time of landing.

(5) An operator shall increase the width margins of subregulation (4) to 18.5 km (10 nm) if the navigational accuracy does not meet the 95% containment level.

## **68. En-route limitations-three or more engines, two engines inoperative**

(1) A person may not take-off an aeroplane having three or more engines where there is no suitable landing aerodrome within 90 minutes at any point along the intended route, with all the engines operating at cruising power, unless that aircraft can, in the event of simultaneous power failure of two critical engines at the most critical point along that route, continue to a suitable landing aerodrome while complying with the requirements of subregulations (2), (3), (4), (5) and (6).

(2) Where the two engines are inoperative en-route, net flight path data shall permit the aeroplane to continue the flight, in the expected meteorological conditions, from the point where two engines are assumed to fail simultaneously, to an aerodrome at which it is possible to land and come to a complete stop when using the prescribed procedure for a landing with two engines inoperative.

(3) The net flight path referred to in subregulation (2) shall clear vertically, by at least 2000 ft. all terrain and obstacles along the route within 9.3 km (5 nm), on either side of the intended track.

(4) At altitudes and in meteorological conditions which require ice protection systems to be operable, the effect of their use on the net flight path data must be taken into account, and if the navigational accuracy does not meet the 95% containment level, an operator must increase the width margin given in subregulation (3), to 18.5 km (10 nm).

(5) Two engines are assumed to fail at the most critical point of that portion of the route where the aeroplane is more than ninety minutes away from an aerodrome at which the performance requirements applicable at the expected landing mass are met, at the all engines long range cruising speed at standard temperature in still air.

(6) The net flight path shall have a positive gradient at 1500 ft. above the aerodrome where the landing is assumed to be made after the failure of two engines.

(7) Fuel jettisoning in an aeroplane referred to in this regulation is permitted to the extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used.

(8) The expected mass of the aeroplane at the point where the two engines are assumed to fail shall not be less than that which would include sufficient fuel to proceed to an aerodrome where the landing is assumed to be made, and to arrive there at least 1500 ft. directly over the landing area and thereafter to fly level for fifteen minutes.

## **69. Alternate aerodromes**

(1) A take-off alternate aerodrome shall be selected and specified in the operational flight plan if the meteorological conditions at the aerodrome of departure are below the operator's established aerodrome landing minima for that operation or if it would not be possible to return to the aerodrome of departure for other reasons.

(2) The take-off alternate aerodrome shall be located within the following flight time from the aerodrome of departure—

- (a) for aeroplanes with two engines, one hour of flight time at a one-engine-inoperative cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass;
- (b) for aeroplanes with three or more engines, two hours of flight time at an all engines operating cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; and
- (c) for aeroplanes engaged in extended diversion time operations (EDTO) where an alternate aerodrome which meets the distance criteria under paragraphs (a) or (b) is not available, the first available alternate aerodrome located within the distance of the operator's approved maximum diversion time considering the actual take-off mass.

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

(4) En-route alternate aerodromes, required under regulation 73 for extended diversion time operations (EDTO) by aeroplanes with two turbine engines shall be selected and specified in the operational and air traffic services (ATS) flight plans.

(5) Destination alternate aerodromes—For a flight to be conducted in accordance with the instrument flight rules, at least one destination alternate aerodrome shall be selected and specified in the operational and air traffic service (ATS) flight plans, unless—

- (a) 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, a reasonable certainty exists that—
  - (i) the approach and landing may be made under visual meteorological conditions; and
  - (ii) separate runways are usable at the time estimated of using the destination aerodrome with at least one runway having an operational instrument approach procedure; or
- (b) the aerodrome is isolated and operations into isolated aerodromes do not require the selection of a destination alternate aerodrome and shall be planned in accordance with regulation 85(g)—
  - (i) for each flight into an isolated aerodrome, a point of no return shall be determined; and
  - (ii) a flight to be conducted to an isolated aerodrome shall not be continued past the point of no return unless



a current assessment of meteorological conditions, traffic and other operational conditions indicate that a safe landing can be made at the estimated time of use.

(6) Two destination alternate aerodromes shall be selected and specified in the operational and air traffic service (ATS) flight plans when, for the destination aerodrome—

- (a) the meteorological conditions at the estimated time of use will be below the operator's established aerodrome operating minima for that operation; or
- (b) meteorological information is not available.

(7) Notwithstanding subregulations (1),(2) and (3),the Authority may, based on the results of a specific safety risk assessment conducted by an operator which demonstrates how an equivalent level of safety shall be maintained, approve operational variations to alternate aerodrome selection criteria, and the specific safety risk assessment shall, include—

- (a) the capabilities of the operator;
- (b) the overall capability of the aeroplane and its systems;
- (c) the available aerodrome technologies, capabilities and infrastructure;
- (d) the quality and reliability of meteorological information;
- (e) the identified hazards and safety risks associated with each alternate aerodrome variation; and
- (f) the specific mitigation measures.

## **70. Maximum distance from an adequate aerodrome for two-engine aeroplanes without an extended diversion time operations (EDTO) approval**

(1) Unless specifically granted an extended diversion time operations (EDTO) approval by the Authority, an air operator certificate (AOC) holder shall not operate a twin engine aeroplane over a route

which contains a point further from an adequate aerodrome than, in the case of—

- (a) large turbine engine powered aeroplanes, the distance flown in sixty minutes at the one-engine-inoperative cruise speed determined in accordance with subregulation (2) with either—
  - (i) a maximum approved passenger seating configuration of twenty or more; or
  - (ii) a maximum take-off mass of 45360 kg or more; and
- (b) reciprocating engine powered aeroplanes, the distance flown in 120 minutes at the one-engine-inoperative cruise speed determined in accordance with subregulation (2) or three hundred nautical miles, whichever is less.

(2) An air operator certificate (AOC) holder shall determine the speed for the calculation of the maximum distance to an adequate aerodrome for each two-engined aeroplane type or variant operated, which shall not exceed  $V_{mo}$  based upon the true airspeed that the aeroplane can maintain with one-engine-inoperative under the following conditions—

- (a) International Standard Atmosphere;
- (b) level flight for —
  - (i) turbine engined powered aeroplanes at flight level 170 or at the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the aeroplane flight manual, whichever is less;
  - (ii) propeller driven aeroplanes at flight level 080 or at the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the aeroplane flight manual, whichever is less;

- (iii) maximum continuous thrust or power on the remaining operating engine;
- (iv) an aeroplane mass not less than that resulting from:
  - (aa) take-off at sea-level at maximum take-off mass until the time elapsed since take-off is equal to the applicable threshold prescribed in subregulation (1);
  - (bb) all engines climb to the optimum long range cruise altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in subregulation (1); and
  - (cc) all engines cruise at the long range cruise speed at this altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in subregulation (1).

(3) An air operator certificate (AOC) holder shall ensure that the following data, specific to each type or variant, is included in the operations manual—

- (a) the one-engine-inoperative cruise speed determined in accordance with subregulation (2); and
- (b) the maximum distance from an adequate aerodrome determined in accordance with subregulations (1) and (2).

(4) The speeds and altitudes specified in this regulation shall only be used for establishing the maximum distance from an adequate aerodrome.

(5) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **71. Extended diversion time operations (EDTO)**

(1) An air operator certificate (AOC) holder shall not conduct operations beyond the threshold distance determined in accordance

with these regulations, unless the operations are approved by the Authority.

(2) Prior to conducting an extended diversion time operation (EDTO) flight, an air operator certificate (AOC) holder shall ensure that a suitable extended diversion time operations (EDTO) en route alternate is available, within either the approved diversion time or a diversion time based on the minimum equipment list generated serviceability status of the aeroplane, whichever is shorter.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

## **72. Requirements for operations beyond 60 minutes to an en-route alternate aerodrome**

(1) An operator who conducts operations beyond 60 minutes from a point on a route to an en-route alternate aerodrome shall ensure that—

- (a) for all aeroplanes, en-route alternate aerodromes are identified and the most up-to-date information is provided to the flight crew on identified en-route alternate aerodromes, including operational status and meteorological conditions; and
- (b) for aeroplanes with two turbine engines, the most up-to-date information provided to the flight crew indicates that conditions at identified en-route alternate aerodromes will be at or above the operator's established aerodrome operating minima for the operation at the estimated time of use.

(2) In addition to the requirements in subregulation (1) and such other safety requirements under these Regulations, an operator shall ensure that overall level of the operational control and flight dispatch procedures, operating procedures and training programmes are taken into account.

(3) An operator who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

### **73. Requirements for extended diversion time operations (EDTO)**

(1) Unless the operation has been specifically approved by the Authority, an aeroplane with two or more turbine engines shall not be operated on a route where the diversion time to an en-route alternate aerodrome from any point on the route, calculated in ISA and still-air conditions at the one-engine inoperative cruise speed for aeroplanes with two turbine engines and at the all engines operating cruise speed for aeroplanes with more than two turbine engines, exceeds a threshold time established for such operations by the Authority.

(2) The Authority shall approve the maximum diversion time for an operator of a particular aeroplane type engaged in extended diversion time operations.

(3) When approving the appropriate maximum diversion time for an operator of a particular aeroplane type engaged in extended diversion time operations, the Authority shall ensure that -

- (a) for all aeroplanes, the most limiting extended diversion time operations (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) for aeroplanes with two turbine engines, the aeroplane is extended diversion time operations (EDTO) certified.

(4) Notwithstanding the provisions of sub regulation (3)(a) the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve operations beyond the time limits of the most time-limited system, and the assessment shall include—

- (a) the capabilities of the operator;
- (b) the overall reliability of the aeroplane;
- (c) the reliability of each time-limited system;
- (d) the relevant information from the aeroplane manufacturer; and
- (e) the specific mitigation measures.

(5) For aeroplanes engaged in extended diversion time operations (EDTO), the additional fuel required shall include the fuel necessary to comply with the extended diversion time operations (EDTO) critical fuel scenario as established by the State of the operator.

(6) An operator shall not proceed with a flight beyond the threshold time in accordance with subregulation (1) unless the identified en-route alternate aerodromes have been re-evaluated for availability and the most up-to date information indicates that, during the estimated time of use the conditions at those aerodromes will be at or above the operator's established aerodrome operating minima for the operation.

(7) If any conditions are identified in accordance with subregulation (6) that would preclude a safe approach and landing at that aerodrome during the estimated time of use, an alternative course of action shall be determined.

(8) The Authority shall, when approving maximum diversion times for aeroplanes with two turbine engines, take into account the following, to provide the overall level of safety intended by the provisions of the **Civil Aviation (Airworthiness) Regulations 2020—**

- (a) the reliability of the propulsion system;
- (b) the airworthiness certification for extended diversion time operations (EDTO) of the aeroplane type; and
- (c) the extended diversion time operations (EDTO) maintenance programme.

**74. Time capability of cargo compartment fire suppression system**

An operator shall ensure that, all flights are planned so that the diversion time to an aerodrome where a safe landing may be made does not exceed the cargo compartment fire suppression time capability of the aeroplane, where the time is identified in the relevant aeroplane documentation, and the time shall be reduced by an operational safety margin specified by the State of the Operator.

**75. Operation in performance-based navigation (PBN), minimum navigation performance specification (MNPS) or reduced vertical separation minimum (RVSM) airspace**

(1) For operations where navigation specification for performance-based navigation (PBN) has been prescribed, an aeroplane shall, in addition to the requirements specified—

- (a) be provided with navigation equipment which will enable operation in accordance with the prescribed navigation specifications;
- (b) have information relevant to the aeroplane navigation specification capabilities listed in the flight manual or other aeroplane documentation approved by the State of the Design or accepted by the Authority; and
- (c) have information relevant to the aeroplane navigation specification capabilities included in the Minimum Equipment List.

(2) The Authority shall, for operations where a navigation specification for performance-based navigation has been prescribed, ensure that the operator has established and documented—

- (a) normal and abnormal procedures including contingency procedures;
- (b) flight crew qualification and proficiency requirements in accordance with the appropriate navigation specification—

- (c) a training programme for relevant personnel consistent with the intended operations; and
- (d) appropriate maintenance procedures to ensure continued airworthiness in accordance with the appropriate navigation specifications.

(3) The Authority shall issue a specific approval for operations based on performance-based navigation authorization required navigation specifications.

(4) A person shall not operate an aircraft in defined portions of airspace where, based on Regional Air Navigation Agreement, minimum navigation performance specifications (MNPS) are prescribed, without a written authorization issued by the Authority for minimum navigation performance specifications (MNPS) operations.

(5) For flights in defined portions of airspace where, minimum navigation performance specifications are prescribed, an aircraft shall be provided with navigation equipment which –

- (a) continuously provides indications to the flight crew of adherence to or departure from the track to the required degree of accuracy at any point along that track; and
- (b) has been authorized by the Authority for the minimum navigation performance specifications operations concerned.

(6) A person shall not operate an aircraft in defined portions of airspace where, based on Regional Air Navigation Agreement, a reduced vertical separation minimum (RVSM) OF 300m (1000ft) is applied between Flight Level 290 and Flight Level 410 inclusive, unless—

- (a) authorization by the Authority in the airspace concerned and
- (b) the aircraft is provided with equipment which is capable of—



- (i) indicating to the flight crew the flight level being flown;
  - (ii) automatically maintaining a selected flight level;
  - (iii) providing an alert to the flight crew when a deviation occurs from the selected flight level and the threshold for the alert shall not exceed 90m (300ft); and
  - (iv) automatically reporting pressure-altitude;
- (c) shall be authorized by the Authority for the operation in the airspace concerned; and
  - (d) shall demonstrate a vertical navigation performance in accordance with the Schedule 2.

(7) Prior to granting the reduced vertical separation minimum (RVSM) approval based on Schedule 1 required in sub regulation (5)—

- (a) the Authority shall be satisfied that—
- (b) the vertical navigation performance capability of the aircraft satisfies the requirements of the altimetry system performance for operations in the reduced vertical separation minimum airspace as prescribed by the Authority;
- (c) the operator has instituted appropriate procedures in respect of continued airworthiness (maintenance and repair) practices and programmes; and
- (d) the operator has instituted appropriate flight crew procedures for operations in reduced vertical separation minimum airspace.

## **76. Reports of height-keeping performance**

(1) The State of Registry that issues an reduced vertical separation minimum (RVSM) approval to an owner or operator shall establish a requirement which ensures that a minimum of two aeroplanes of each aircraft type grouping of the owner or operator have their height-keeping performance monitored, at least once every two years or within intervals of 1 000 flight hours per aeroplane, whichever period is longer.

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

## **77. Electronic navigation data management**

(1) An operator shall not employ electronic navigation data products that have been processed for application in the air and on the ground unless the State of the Operator has approved the operator's procedures or unless the process applied and the products delivered meets acceptable standards of integrity and the electronic navigation data products are compatible with the equipment to which they are intended to be used.

(2) The State of the Operator shall ensure that the operator continues to monitor both the process and the products.

(3) An operator shall implement procedures that ensure the minimum equipment list (MEL) distribution and insertion of current and unaltered electronic navigation data to all aircraft that requires it.

## **78. Compliance with visual and electronic glide slopes**

(1) A pilot in command (PIC) of an aircraft approaching to land on a runway served by a visual approach slope indicator or precision approach path indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.

(2) A pilot in command (PIC) of a turbojet, turbofan, or large aircraft approaching to land on a runway served by an instrument landing system shall fly that aircraft at or above the glide slope from the point of interception of the glide slope to the decision height.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **79. Restriction or suspension of operations - commercial air transport**

(1) Where a pilot in command (PIC) or an air operator certificate (AOC) holder knows of conditions, including aerodrome and runway conditions, that are a hazard to safe operations, that pilot in command (PIC) or air operator certificate (AOC) holder shall restrict or suspend all commercial air transport operations to such aerodromes and runways as may be necessary, until those conditions are corrected or improve.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **80. Continuation of flight when destination aerodrome is temporarily restricted**

A pilot in command (PIC) shall not allow a flight to continue toward any aerodrome of intended landing where commercial air transport operations is restricted or suspended, unless-

- (a) in the opinion of the pilot in command (PIC), the conditions that are a hazard to safe operations may reasonably be expected to be corrected or to have improved by the estimated time of arrival; or
- (b) there is no safer procedure.

## **81. Meteorological conditions-visual flight rules (VFR) flights**

A flight to be conducted in accordance with VFR shall not be commenced unless current meteorological reports or a combination of current reports and forecasts indicate that the meteorological conditions along the route or that part of the route to be flown under VFR will, at the appropriate time, be such as to enable compliance with VFR.

## **82. Meteorological conditions - instrument flight rules (IFR) Flights**

(1) A flight to be conducted in accordance with the instrument flight rules shall not—

- (a) take off from the departure aerodrome unless the meteorological conditions, at the time of use, are at or above the operator's established aerodrome operating minima for that operation; and
- (b) take off or continue beyond the point of in-flight re-planning unless at the aerodrome of intended landing or at each alternate aerodrome to be selected in compliance with Regulation 25, the current meteorological reports or a combination of the 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.

## **83. Visibility and cloud base**

(1) The operator shall specify appropriate incremental values for height of cloud base and visibility, which shall be acceptable to the Authority, and which shall be added to the operator's established aerodrome operating minima to ensure that an adequate margin of safety is observed in determining whether or not an approach and landing may be safely carried out at each alternate aerodrome.

(2) The Authority shall approve a margin of time established by the operator for the estimated time of use of an aerodrome.

## **84. Icing conditions**

(1) A flight to be operated in known or expected icing conditions shall not be commenced unless the aeroplane is certificated and equipped to cope with such conditions.

(2) A flight to be planned or expected to operate in suspected or known ground icing conditions shall not take off unless the aeroplane

is inspected for icing and, if necessary, is given appropriate de-icing or anti-icing treatment.

(3) Accumulation of ice or other naturally occurring contaminants shall be removed so that the aeroplane is kept in an airworthy condition prior to take-off.

## **85. Fuel requirements**

(1) An aeroplane shall carry a sufficient amount of usable fuel to complete the planned flight safely and to allow for deviations from the planned operation.

(2) The amount of usable fuel to be carried shall, as a minimum, be based on the current aeroplane-specific data derived from the fuel consumption monitoring system, and where the current aeroplane-specific data is not available, the amount of usable fuel shall be based on the data provided by the aeroplane manufacturer.

(3) In addition to subregulation (2), the amount of usable fuel shall be based on the operating conditions for the planned flight including—

- (a) the anticipated aeroplane mass;
- (b) the current meteorological reports or a combination of current reports and forecasts;
- (c) the air traffic services procedures, restrictions and anticipated delays; and
- (d) the effects of deferred maintenance items and configuration deviations.

(4) The pre-flight calculation of usable fuel required shall include—

- (a) taxi fuel, which shall be the amount of fuel expected to be consumed before take-off, taking into account the local conditions at the aerodrome of the departure and the auxiliary power unit (APU) fuel consumption;

- (b) trip fuel, which shall be the amount of fuel required to enable the aeroplane to fly from take-off, or the point of inflight re-planning, until landing at the destination aerodrome taking into account the operating conditions of subregulation (3);
- (c) contingency fuel, which shall be the amount of fuel required to compensate for unforeseen factors and it shall be five per cent of the planned trip fuel or of the fuel required from the point of in-flight re-planning based on the consumption rate used to plan the trip fuel but, in any case, shall not be lower than the amount required to fly for five minutes at holding speed at 450 m (1 500 ft.) above the destination aerodrome in standard conditions;
- (d) destination alternate fuel, where a destination alternate aerodrome is required, which shall be the amount of fuel required to enable the aeroplane to—
  - (i) perform a missed approach at the destination aerodrome;
  - (ii) climb to the expected cruising altitude;
  - (iii) fly the expected routing;
  - (iv) descend to the point where the expected approach is initiated; and
  - (v) conduct the approach and landing at the destination alternate aerodrome;
- (e) destination alternate fuel, where two destination alternate aerodromes are required, which shall be the amount of fuel, as calculated in paragraph (4)(d), which is required to enable the aeroplane to proceed to a destination alternate aerodrome which requires the greater amount of alternate fuel;
- (f) where a flight is operated without a destination alternate aerodrome, the which shall be amount of fuel required to enable the aeroplane to fly for 15 minutes at holding

speed at 450 m (1 500 ft.) above destination aerodrome elevation in standard conditions;

- (g) where the aerodrome of intended landing is an isolated aerodrome—
  - (i) for a reciprocating engine aeroplane, which shall be the amount of fuel required to fly for 45 minutes plus 15 per cent of the flight time planned to be spent at cruising level, including final reserve fuel, or two hours, whichever is less; or
  - (ii) for a turbine-engine aeroplane, which shall be the amount of fuel required to fly for two hours at normal cruise consumption above the destination aerodrome, including final reserve fuel;
- (h) final reserve fuel, which shall be the amount of fuel calculated using the estimated mass on arrival at the destination alternate aerodrome, or the destination aerodrome when no destination alternate aerodrome is required, and this case -
  - (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-engine aeroplane, the amount of fuel required to fly for 30 minutes at holding speed at 450 m (1 500 ft.) above aerodrome elevation in standard conditions;
- (i) additional fuel, which shall be the supplementary amount of fuel required if the minimum fuel calculated in accordance with this subregulation 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 of pressurization, whichever requires the greater amount of fuel based on the assumption that such a failure occurs at the most critical point along the route; or

- (ii) fly for 15 minutes at holding speed at 450 m (1 500 ft.) above the aerodrome elevation in standard conditions; and
- (j) the fuel required to—
  - (i) make an approach and landing;
  - (ii) allow an aeroplane engaged in extended diversion time operations (EDTO) to comply with the extended diversion time operations (EDTO) critical fuel scenario as established by the Authority; and
  - (iii) meet any additional requirements which are not specified in this subregulation;

(5) An operator shall determine one final reserve fuel value for each aeroplane type and variant in the fleet of the operator rounded up to an easily recalled figure.

(6) A flight shall not commence unless the usable fuel on board meets the requirements in subregulation (4) if required and shall not continue from the point of in-flight re-planning unless the usable fuel on board meets the requirements in subregulation (4) if required.

(7) Notwithstanding subregulation (4), the Authority may, based on the results of a specific safety risk assessment conducted by the operator, which demonstrates how an equivalent level of safety is to be maintained, approve variations to the pre-flight fuel calculation of taxi fuel, trip fuel, contingency fuel, destination alternate fuel, and additional fuel.

(8) The specific safety risk assessment shall include—

- (a) flight fuel calculations;
- (b) the capabilities of the operator to including a data-driven method and that includes a fuel consumption monitoring programme and the advanced use of alternate aerodromes; and



- (c) specific mitigation measures.

(9) The use of fuel after flight commencement for purposes other than originally intended during pre-flight planning shall require a re-analysis and, if applicable, adjustment of the planned operation.

## **86. In-flight fuel management**

(1) The operator shall establish policies and procedures, to ensure that inflight fuel checks and fuel management are performed.

(2) The policies and procedures shall be approved by the Authority.

(3) The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board an aeroplane is not less than the fuel required to proceed to an aerodrome where a safe landing may be made with the planned final reserve fuel remaining upon landing.

(4) The pilot-in-command shall request for delay information from air traffic control when unanticipated circumstances may result in landing at the destination aerodrome with less than the final reserve fuel and any fuel required to proceed to an alternate aerodrome or the fuel required to proceed to an isolated aerodrome.

(5) The pilot-in-command shall advise the air traffic control of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than the planned final reserve fuel.

(6) The pilot-in-command shall 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 where a safe landing may be made, is less than the planned final reserve fuel.

## **87. Refueling with passengers on board**

(1) An aeroplane shall not be refueled when passengers are embarking, are on board or are disembarking unless the aeroplane is properly attended to by qualified personnel who are ready to initiate and direct an evacuation of the aeroplane by the most practical and expeditious means available.

(2) When refueling with passengers embarking, on board or disembarking, a two-way communication shall be maintained by the aeroplane's inter-communication system or other suitable means between the ground crew supervising the refueling and the qualified personnel on board the aeroplane.

(3) Additional precautions are required when refueling with fuels other than aviation kerosene or when refueling results in a mixture of aviation kerosene with other aviation turbine fuels, or when an open line is used.

## **88. Oxygen supply**

(1) The approximate altitudes in the standard atmosphere corresponding to the values of absolute pressure are—

Absolute pressure	Meters	Feet
700 hPa	3 000	10 000
620 hPa	4 000	13 000
376 hPa	7 600	25 000

(2) A flight to be operated at flight altitudes at which the atmospheric pressure in the personnel compartments is less than 700 hPa shall not be commenced unless sufficient stored breathing oxygen is carried to supply—

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

- (b) the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa.

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

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

## **89. In-flight procedures -Aerodrome operating minima**

(1) A flight shall not be continued towards the aerodrome of intended landing, unless the latest available information indicates that at the expected time of arrival, a landing can be effected at that aerodrome or at one destination alternate aerodrome, in compliance with Regulation 37.

(2) An instrument approach shall not be continued below 300 m (1 000 ft.) above the aerodrome elevation or into the final approach segment unless the reported visibility or controlling RVR is at or above the aerodrome operating minima.

(3) If, after entering the final approach segment or after descending below 300 m (1 000 ft.) above the aerodrome elevation, the reported visibility or controlling RVR falls below the specified minimum, the approach may be continued to DA or DH or MDA or

MDH but in any case, an aeroplane shall not continue its approach-to-land at any aerodrome beyond a point at which the limits of the operating minima specified for that aerodrome would be infringed.

#### **90. Meteorological observations**

The pilot-in-command shall report the runway braking action special air-report (AIREP) when the runway braking action encountered is not as good as reported.

#### **91. Hazardous flight conditions**

(1) Where hazardous flight conditions are encountered, other than those associated with meteorological conditions, the conditions shall be reported to the appropriate aeronautical station, as soon as possible.

(2) The reports made under subregulation (1) shall give the details that may be pertinent to the safety of other aircraft.

#### **92. Flight crew members at duty stations**

(1) All flight crew members who are required to be on flight deck duty shall be at their stations during take-off and landing.

(2) During the en-route phase of flight, all flight crew members required to be on flight deck duty shall remain at their stations except when their absence is necessary for the performance of duties in connection with the operation of the aeroplane or for physiological needs.

(3) All flight crew members shall keep their seat belts fastened when at their stations.

(4) Any flight crew member who occupies a pilot's seat shall keep the safety harness fastened during the take-off and landing phase.

(5) All other flight crew members shall keep their safety harnesses fastened during the take-off and landing phases unless the shoulder

straps interfere with the performance of their duties, in which case the shoulder straps may be unfastened but the seat belt shall remain fastened.

### **93. Use of oxygen**

(1) All flight crew members, when engaged in performing duties essential to the safe operation of an aeroplane in flight, shall use breathing oxygen continuously whenever the circumstances prevail for which its supply has been required in regulation 33.

(2) All flight crew members of pressurized aeroplanes operating above an altitude where the atmospheric pressure is less than 376 hPa shall have available at the flight duty station, a quick-donning type of oxygen mask which readily supplies oxygen upon demand.

### **94. 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, the cabin crew shall have means of protection that enable them to administer first aid to passengers during stabilized flight following the emergency.

(2) Passengers should be safeguarded by such devices or operational procedures as will ensure reasonable probability of their surviving the effects of hypoxia in the event of loss of pressurization.

### **95. In-flight operational instructions**

Operational instructions involving a change in the air traffic service (ATS) flight plan shall, when practicable, be coordinated with the appropriate air traffic service (ATS) unit before transmission to the aeroplane.

## **96. Instrument flight procedures.**

(1) The Authority shall approve and promulgate one instrument approach procedures, or more, designed to support instrument approach operations in which the aerodrome is located, to serve each instrument runway or aerodrome utilized for instrument flight operations.

(2) All aeroplanes operated in accordance with instrument flight rules shall comply with the instrument flight procedures approved by the Authority in which the aerodrome is located.

## **97. Instrument flight rules take-off minima**

(1) Unless otherwise authorised by the Authority, no pilot operating an aircraft in commercial air transport operations shall accept a clearance to take off from an aerodrome under instrument flight rules unless the weather conditions are at or above—

- (a) for aircrafts, with two engines or less, one thousand five hundred metres;
- (b) for aircraft with more than two engines, eight hundred metres.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **98. Instrument approach procedures and Instrument flight rules landing minima**

(1) A person shall not make an instrument approach at an airport except in accordance with the instrument flight rules weather minima and instrument approach procedures set out in the air operator certificate (AOC) holder's operations specifications.

(2) The Authority shall approve and promulgate one instrument approach procedure or more, which shall be designed in accordance with the classification of instrument approach and landing operations of the concerned aerodrome, to serve each instrument runway or the aerodrome utilized for instrument flight operations.

(3) All aeroplanes operated in accordance with instrument flight rules shall comply with the instrument flight procedures approved by the Authority.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points or imprisonment not exceeding one year or both.

## **99. Commencing an instrument approach**

(1) A pilot shall not continue an approach past the final approach fix, or where a final approach fix is not used, begin the final approach segment of an instrument approach procedure, at any aerodrome unless a source approved by the Authority issues a weather report for that aerodrome and the latest weather report for that aerodrome indicates the visibility to be equal to or more than the visibility minima prescribed for that procedure.

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

(3) Where a pilot begins the final approach segment of an instrument approach procedure and subsequently receives a weather report indicating below minimum conditions, the pilot may continue the approach to decision height or minimum descent altitude.

(4) For the purpose of this regulation, the final approach segment begins at the final approach fix or facility prescribed in the instrument approach procedure.

(5) For the purpose of this regulation, “the final approach segment” means the segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

(6) When a final approach fix is not prescribed for a procedure that includes a procedure turn, the final approach segment begins at the point where the procedure turn is completed and the aircraft is established inbound toward the aerodrome on the final approach course within the distance prescribed in the procedure.

(8) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **100. Threshold crossing height for precision approaches**

(1) An operator shall establish operational procedures designed to ensure that an aircraft being used to conduct precision approaches crosses the threshold of previous approach by a safe margin with the aircraft in the landing configuration and altitude.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **101. Operation below decision height or minimum descent altitude**

Where a decision height or minimum descent altitude is applicable, a pilot shall not operate an aircraft at any aerodrome below the authorised minimum descent altitude, or continue an approach below the authorised decision height unless—

- (a) the aircraft is continuously in a position from which a descent to a landing on the intended runway may be made at a normal rate of descent using normal manoeuvres;
- (b) a descent rate shall allow touchdown to occur within the touchdown zone of the runway of intended landing;
- (c) the flight visibility is not less than the visibility prescribed in the standard instrument approach being used; and
- (d) 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 shall not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the



red side row bars are also distinctly visible and identifiable;

- (ii) threshold or the threshold markings;
- (iii) threshold lights;
- (iv) the runway end identifier lights;
- (v) the visual approach slope indicator system; or precision approach path indicator;
- (vi) the touchdown zone or touchdown zone markings;
- (vii) the touchdown zone lights;
- (viii) the runway or runway markings; or
- (ix) the runway lights.

(2) The visual references specified in subregulation (1) (d) shall not apply to Category II and Category III operations.

(3) The required visual references under Category II and Category III operations shall be provided in the air operator certificate (AOC) holder's operations specifications or a special authorisation prescribed by the Authority.

## **102. Landing during instrument meteorological conditions**

(1) A pilot operating an aircraft shall not land that aircraft when the flight visibility is less than the visibility prescribed by the Authority, in the standard instrument approach procedure being used.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

## **103. Execution of a missed approach procedure**

A pilot operating an aircraft shall immediately execute an appropriate missed approach procedure where—

- (a) the required visual reference criteria is not met in the following situations—

- (i) when the aircraft is being operated below minimum descent altitude (MDA); or
  - (ii) upon arrival at the missed approach point, including a decision height where a decision height is specified and its use is required, and at any time after that, until touchdown; or
- (b) an identifiable part of the aerodrome is not distinctly visible to the pilot during a circling manoeuvre at or above minimum descent altitude (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.

#### **104. Minimum altitudes for use of an autopilot**

(1) Except as provided in subregulations (2),(3) and (4) , a person shall not use an autopilot en route, including climb and descent, at an altitude above the terrain that is less than twice the maximum altitude loss specified in the aircraft flight manual for malfunction of the autopilot under cruise conditions, or less than 500 feet, whichever is higher.

(2) When using an instrument approach facility, a person shall not use an autopilot at an altitude above the terrain that is less than twice the maximum altitude loss specified in the aircraft flight manual for a malfunction of the autopilot under approach conditions, or less than 50 feet below the approved minimum descent altitude or decision height for the facility, whichever is higher, except where the reported weather conditions are—

- (a) less than the basic visual flight rules (VFR) weather conditions as specified in the Civil Aviation Authority (Rules of the Air) Regulations, 2020, and in this case a person shall not use an autopilot with an approach coupler for instrument landing system approaches at an altitude above the terrain that is less than 50 feet higher than the maximum altitude loss specified in the aircraft

flight manual for the malfunction of the autopilot with approach coupler under approach conditions; and

- (b) equal to or better than the basic VFR minima as specified in the Civil Aviation Authority (Rules of the Air) Regulations 2020, and in this case a person shall not use an autopilot with an approach coupler for instrument landing system approaches at an altitude above the terrain that is less than the maximum altitude loss specified in the aircraft flight manual for the malfunction of the autopilot with approach coupler under approach conditions, or 50 feet, whichever is higher.

(3) Notwithstanding subregulation (1) or (2), the Authority shall issue operation specifications to allow the use and to touchdown, of an approved flight control guidance system with automatic capability, in any case in which—

- (a) the system does not contain any altitude loss (above zero) specified in the aircraft flight manual for malfunction of the autopilot with approach coupler; and
- (b) the Authority finds that the use of the system to touchdown will not otherwise affect the safety standards required by this regulation.

(4) Notwithstanding subregulation (1), the Authority shall issue operation specifications to allow the use of an approved autopilot system with automatic capability below the altitude specified in subregulation (1) during the take-off and initial climb phase of flight provided—

- (a) the aircraft flight manual specifies a minimum altitude engagement certification restriction;
- (b) the system is not engaged prior to the minimum engagement certification restriction specified in the aircraft flight manual or an altitude specified by the Authority, whichever is higher; and

- (c) the Authority finds that the use of the system will not otherwise affect the safety standards required by this regulation.

(5) Unless otherwise specified in an air traffic control instruction, to avoid unnecessary airborne collision avoidance system (ACAS II), resolution advisories in aircraft at, or approaching, adjacent altitudes or flight levels, operators shall specify procedures by which an aeroplane climbing or descending to an assigned altitude or flight level, especially with an autopilot engaged, may do so at a rate less than 8 m per sec or 1 500 ft. per min (depending on the instrumentation available) throughout the last 300 m (1 000 ft.) of climb or descent to the assigned level when the pilot is made aware of another aircraft at or approaching, an adjacent altitude or flight level.

### **105. Minimum flight altitudes**

(1) An operator shall be permitted to establish minimum flight altitudes for those routes flown for which minimum flight altitudes have been established by the State flown over, provided minimum flight altitudes shall not be less than those established by that State flown over.

(2) An operator shall specify the procedure intended to determine minimum flight altitudes for operations conducted over routes for which minimum flight altitudes have not been established by the State flown over and shall include this procedure in the operations manual.

(3) The minimum flight altitudes determined in accordance with subregulation (2) shall not be lower than the attitudes specified in Civil Aviation Authority (Rules of Air and Air Traffic Control) Regulations 2020.

(4) The operator shall, in establishing minimum flight altitudes, carefully consider the probable effects of the following factors on the safety of the operation in question—

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

#### **106. Receiver failure**

(1) Where an aircraft radio station is unable to establish communication due to receiver failure, that aircraft shall transmit—

- (a) reports at the scheduled times, or positions, on the frequency in use, preceded by the phrase “TRANSMITTING BLIND DUE TO RECEIVER FAILURE”; and
- (b) the intended message, following this by a complete repetition, during this procedure, the aircraft shall also advise the time of its next intended transmission.

(2) An aircraft which is provided with air traffic control service or advisory service shall, in addition to complying with subregulation (1), transmit information regarding the intention of the pilot-in-command (PIC) with respect to the continuation of the flight of the aircraft.

(3) Where a pilot in command (PIC) is unable to establish communication due to airborne equipment failure he or she shall, when the aircraft is so equipped, select the appropriate secondary surveillance radar (SSR) code 7600 to indicate radio failure.

#### **107. Aeroplane operating procedures for noise abatement.**

(1) Aeroplane operating procedures for noise abatement shall comply with the provisions of the Civil Aviation (Construction of Flight Procedures) Regulations, 2020.

(2) Noise abatement procedures specified by the operator for any one aeroplane type shall be the same for all aerodromes.

### **108. Aeroplane operating procedures for rates of climb, descent and landing performance**

(1) Unless otherwise specified in an air traffic control instruction, to avoid unnecessary airborne collision avoidance system (ACAS II) resolution advisories in aircraft at or approaching adjacent altitudes or flight levels, operators should specify procedures by which an aeroplane climbing or descending to an assigned altitude or flight level, especially with an autopilot engaged, may do so at a rate less than 8 m per sec or 1 500 ft. per min (depending on the instrumentation available) throughout the last 300 m (1 000 ft.) of climb or descent to the assigned level when the pilot is made aware of another aircraft at or approaching an adjacent altitude or flight level.

(2) An approach to land shall not be continued below 300m (1000ft) above aerodrome elevation unless the pilot-in-command is satisfied that, with the runway surface condition information available, the aeroplane performance information indicates that a safe landing can be made.

### **109. Duties of pilot-in-command**

(1) The pilot-in-command shall be responsible for the safety of all crew members, passengers and cargo on board when the doors are closed.

(2) The pilot-in-command shall also be responsible for the operation and safety of the aeroplane from the moment the aeroplane is ready to move for the purpose of taking off until the moment it finally comes to rest at the end of the flight and the engine(s) used as primary propulsion units are shut down.

(3) The pilot-in-command shall ensure that the checklists specified in regulation 16 are complied with in detail.

(4) The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the aeroplane, resulting in serious injury or death of any person or substantial damage to the aeroplane or property.

(5) The pilot-in-command shall be responsible for reporting all known or suspected defects in the aeroplane, to the operator, at the termination of the flight.

(6) The pilot in command (PIC) shall submit a report to the Authority of any accident which occurred while that pilot in command (PIC) was responsible for the flight.

#### **110. Duties of flight operations officer or flight dispatcher**

(1) A flight operations officer or flight dispatcher shall, using the method of control and supervision of flight operations in the **Civil Aviation (Air Operator Certification and Administration) Regulations 2020**—

- (a) assist the pilot-in-command in flight preparation and provide the relevant information;
- (b) assist the pilot-in-command in preparing the operational and air traffic service (ATS) flight plans, sign when applicable and file the air traffic service (ATS) flight plan with the appropriate air traffic service (ATS) unit;
- (c) furnish the pilot-in-command while in flight, by appropriate means, with information which may be necessary for the safe conduct of the flight; and
- (d) notify the appropriate air traffic service (ATS) unit when the position of the aeroplane cannot be determined by an aircraft tracking capability, and attempts to establish communication are unsuccessful.

(2) In the event of an emergency, a flight operations officer or flight dispatcher shall—

- (a) initiate the procedures in the operations manual while avoiding taking any action that would conflict with ATC procedures; and
- (b) convey safety-related information to the pilot-in-command that may be necessary for the safe conduct of the flight, including information related to any amendments to the flight plan that become necessary in the course of the flight.

**111. Additional requirements for operations by aeroplanes with turbine engines beyond 60 minutes to an en-route alternate aerodrome including extended diversion time operations (EDTO)**

(1) Operators who conduct operations beyond 60 minutes from a point on a route to an en-route alternate aerodrome shall ensure that—

- (a) for all aeroplanes, en-route alternate aerodromes are identified and that the most up-to-date information is provided to the flight crew on identified en-route alternate aerodromes, including the operational status and meteorological conditions of the alternate aerodromes; and
- (b) for aeroplanes with two turbine engines, the most up-to-date information provided to the flight crew indicates that the 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.

(2) Save as provided in subregulation (1), all operators shall ensure that, the operational control and flight dispatch procedures, the operating procedures and the training programs are taken into account and provide the overall level of safety intended by the provisions of these Regulations.

(3), An aeroplane with two or more turbine engines shall not be operated, unless the operation has been specifically approved by the Authority, on a route where the diversion time to an en-route alternate



aerodrome from any point on the route, calculated in ISA and still-air conditions at the one-engine-inoperative cruise speed for aeroplanes with two turbine engines and at the all engines operating cruise speed for aeroplanes with more than two turbine engines, exceeds a threshold time established for such operations by that Authority.

(4) The maximum diversion time for the operator of a particular aeroplane type engaged in extended diversion time operations shall be approved by the Authority.

(5) When approving the appropriate maximum diversion time for the operator of a particular aeroplane type engaged in extended diversion time operations, the Authority shall ensure that -

- (a) for all aeroplanes, the most limiting extended diversion time operations (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) for aeroplanes with two turbine engines, the aeroplane is extended diversion time operations (EDTO) certified.

(6) Notwithstanding subregulation (5)(a), the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve operations beyond the time limits of the most time-limited system.

(7) The specific safety risk assessment as provided in subregulation (6) shall include—

- (a) the capabilities of the operator;
- (b) the overall reliability of the aeroplane;
- (c) the reliability of each time-limited system;
- (d) the relevant information from the aeroplane manufacturer; and
- (e) the specific mitigation measures.

(8) For aeroplanes engaged in extended diversion time operations (EDTO), the additional fuel required under regulation 30 shall include the fuel necessary to comply with the extended diversion time operations (EDTO) critical fuel scenario as established by the Authority.

(9) A flight shall not proceed beyond the threshold time in accordance with subregulation (3) unless the identified en-route alternate aerodromes have been re-evaluated for availability and the most up-to-date information indicates that, during the estimated time of use, the conditions at those aerodromes will be at or above the operator's established aerodrome operating minima for the operation.

(10) Where conditions that may preclude a safe approach and landing at that aerodrome during the estimated time of use, are identified, the operator shall determine an alternative course of action.

(11) The Authority shall, when approving maximum diversion times for aeroplanes with two turbine engines, ensure that the reliability of the propulsion system, the airworthiness certification for extended diversion time operations (EDTO) of the aeroplane type and the extended diversion time operations (EDTO) maintenance programme, are taken into account in providing the overall level of safety intended by the provisions of the **Civil Aviation (Airworthiness) Regulations 2020**.

## **112. Carry-on baggage**

The operator shall ensure that all baggage carried onto an aeroplane and taken into the passenger cabin is adequately and securely stowed.

## **113. Additional requirements for single pilot operations under the instrument flight rules (IFR) or at night**

(1) An aeroplane shall not be operated under instrument flight rules (IFR) or at night by a single pilot unless approved by the Authority.

(2) An aeroplane shall not be operated under instrument flight rules (IFR) or at night by a single pilot unless—

- (a) the flight manual does not require a flight crew of more than one pilot;
- (b) the aeroplane is propeller-driven;
- (c) the maximum approved passenger seating configuration is not more than nine;
- (d) the maximum certificated take-off mass does not exceed 5700 kg;
- (e) the aeroplane is equipped as described in the Civil Aviation Authority (Instruments and Equipment) Regulations 2020; and
- (f) the pilot-in-command has satisfied requirements of experience, training, checking and recency described in Regulation 148.

(3) An aeroplane operated under instrument flight rules (IFR) or at night by a single pilot shall have the additional requirements specified in Schedule 3.

#### **114. Location of an aircraft in distress**

(1) An aeroplane in distress shall manually or automatically activate the transmission of information from which its position may be determined by the operator and the position information shall contain a time stamp and where transmission is automatically transmitted, the position information shall be capable of transmitting that information in the event of aircraft electrical power loss, at least for the expected duration of the entire flight.

(2) An aircraft is in a distress condition where it is in a state that, if the aircraft behavior event is left uncorrected, may result in an accident.

(3) The autonomous transmission of position information shall be active when an aircraft is in a distress condition and in case of a triggered transmission system, initial transmission of position

information shall commence immediately or no later than five seconds after the detection of the activation event.

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

(5) The State of the Operator shall identify the organisations that will require the position information of an aircraft in an emergency phase and which may include the air traffic service (ATS) unit and the SAR rescue coordination center (RCC) and sub-centers.

(6) Where autonomous transmission of position information has been activated, it shall only be able to be deactivated using the same mechanism that activated it.

(7) The accuracy of position information shall, as a minimum, meet the position accuracy requirements established for emergency locator transmitters (ELT).

#### PART IV—AEROPLANE PERFORMANCE OPERATING LIMITATIONS

### **115. General**

(1) Aeroplanes shall be operated in accordance with a comprehensive and type certification made under the Civil Aviation Authority (Airworthiness) Regulations, 2020.

(2) Except as otherwise required by these Regulations, single-engine aeroplanes shall only be operated in conditions of weather and light, and over such routes and diversions from these, that permit a safe forced landing to be executed in the event of engine failure.

(3) The State of Registry shall ensure that the level of performance specified in regulation 52 is met as far as may be practicable for aeroplanes exempted by the Authority which are not applicable because of the exemption provided for in Article 41 of the Convention.

## **116. Performance limitation of aeroplanes above 5700kg**

(1) The level of performance defined by the appropriate parts of the comprehensive and type certification referred to in regulation 51(1) shall be at least substantially equivalent to the overall level in these Regulations.

(2) An aeroplane shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.

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

(4) A flight shall not be commenced unless the performance information provided in the flight manual, supplemented as necessary with other data acceptable to the Authority, indicates that this regulation can be complied with for the flight to be undertaken.

(5) In applying this regulation, the operator shall take into account all factors that significantly affect the performance of the aeroplane, including the mass of the aeroplane, the operating procedures, the pressure altitude appropriate to the elevation of the aerodrome, the ambient temperature, the wind, the runway slope, and surface conditions of the runway such as, presence of snow, slush, water, or ice for landplanes, water surface condition for seaplanes.

(6) The factors in subregulation (5) shall be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the aeroplane is operated.

(7) In applying the standards of this regulation, account shall be taken of all factors that significantly affect the performance of

the aeroplane, including, the mass of the aeroplane, the operating procedures, the pressure-altitude appropriate to the elevation of the aerodrome, the runway slope, the ambient temperature, the wind, and surface conditions of the runway at the expected time of use, such as presence of snow, slush, water, or ice for landplanes, water surface condition for seaplanes.

(8) The factors in subregulation (7) shall be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the aeroplane is operated.

## **117. Mass limitations**

(1) The mass of the aeroplane at the start of take-off—

- (a) shall not exceed the mass at which subregulation (2) is complied with, or the mass at subregulations (5), (6) and (7) are complied with, allowing for expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is envisaged in applying subregulations (6) and (7) and, in respect of alternate aerodromes, subregulations (1)(c) and (7);
- (b) shall not exceed the maximum take-off mass specified in the flight manual for the pressure-altitude appropriate to the elevation of the aerodrome, and, if used as a parameter to determine the maximum take-off mass, any other local atmospheric condition;
- (c) shall not exceed the estimated mass for the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodrome, or exceed the maximum landing mass specified in the flight manual for the pressure-altitude appropriate to the elevation of those aerodromes, and if used as a parameter to determine the maximum landing mass, any other local atmospheric condition; and

- (d) at the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodrome, shall not exceed the relevant maximum masses at which compliance has been demonstrated with the applicable noise certification, unless otherwise authorized in exceptional circumstances for a certain aerodrome or a runway where there is no noise disturbance problem, by the Authority.

(2) An aeroplane shall be able, in the event of a critical engine failing, or for other safety reasons, at any point in the take-off, to discontinue the take-off and stop within the accelerate-stop distance available, or to continue the takeoff and clear all obstacles along the flight path by an adequate vertical or horizontal distance until the aeroplane is in position to comply with subregulation (6).

(3) When determining the resulting take-off obstacle accountability area, the operating conditions, such as the crosswind component and navigation accuracy shall be taken into account.

(4) In determining the length of the runway available, account shall be taken of the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.

(5) An aeroplane shall, in the event of the critical engine becoming inoperative at any point along the route or planned diversions from the route, be able to continue the flight to an aerodrome at which the requirement of subregulation(7) may be met without flying below the minimum flight altitude at any point.

(6) In the case of aeroplanes having three or more engines, on any part of a route where the location of en-route alternate aerodromes and the total duration of the flight are such that the probability of a second engine becoming inoperative must be allowed if the general level of safety implied by these Regulations is to be maintained, the aeroplane shall, in the event of any two engines becoming inoperative, be able to continue the flight to an en-route alternate aerodrome and land.

(7) The pilot in command shall, at the aerodrome of intended landing and at any alternate aerodrome, after clearing all obstacles in the approach path by a safe margin, be able to land an aircraft, with assurance that it can come to a stop or, for a seaplane, to a satisfactorily low speed, within the landing distance available.

(8) Allowance shall be made for expected variations in the approach and landing techniques, if the allowance has not been made in the scheduling of performance data.

### **118. Obstacle Data**

(1) The Authority shall provide obstacle data to enable an operator to develop procedures to comply with these regulations.

(2) The operator shall take account of charting accuracy when assessing compliance with these regulations.

### **119. Additional requirements for operations of single-engine turbine-powered aeroplanes at night and in instrument meteorological conditions (IMC)**

In approving operations by single-engine turbine-powered aeroplanes at night or in IMC, the Authority shall ensure that the airworthiness certification of the aeroplane is appropriate and that the overall level of safety intended by the provisions of these regulations and **the Civil Aviation (Airworthiness) Regulation 2020** as determined by—

- (a) the reliability of the turbine engine;
- (b) the operator's maintenance procedures, operating practices, flight dispatch procedures and crew training programs; and
- (c) the equipment and the other requirements of the Civil Aviation Authority (Instrument and Equipment) Regulations 2020.



PART V— AEROPLANE INSTRUMENTS, EQUIPMENT  
AND FLIGHT DOCUMENTS

**120. General**

(1) In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed in this regulation shall be installed or carried, as appropriate, on aeroplanes as may be appropriate for the type of aeroplane and to the circumstances under which the flight is to be conducted.

(2) The prescribed instruments and equipment, including their installation, shall be approved or accepted by the State of Registry.

(3) An operator shall ensure that a certified true copy of the air operator certificate specified in these regulations, and a certified true copy of the operations specifications relevant to the aeroplane type, issued with the certificate are carried on board an aeroplane.

(4) When the certificate and the associated operations specifications are issued by the State of Registry in a language other than English, an English translation shall be included.

(5) An operator shall include in the operations manual a **minimum equipment list (MEL)**, approved by the Authority which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop in a case where any instrument, equipment or systems become inoperative.

(6) Where the Authority is not the State of Registry, the Authority shall ensure that the minimum equipment list (MEL) does not affect the aeroplane's compliance with the airworthiness requirements applicable in Uganda.

(7) The operator shall provide the operations staff and flight crew with an aircraft operating manual, for each aircraft type operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft.

(8) The manual referred to under subregulation (7) shall include details of the aircraft systems and of the checklists to be used, and the manual shall observe human factors principles.

### **121. Equipping of all aeroplanes**

(1) An aeroplane shall be equipped with instruments which enables the flight crew to control the flight path of the aeroplane to carry out any required procedural maneuvers and observe the operating limitations of the aeroplane in the expected operating conditions.

(2) An aeroplane shall be equipped with—

- (a) accessible and adequate medical supplies which comprise of—
  - (i) one or more first-aid kits for the use of cabin crew in managing incidents of ill health;
  - (ii) for aeroplanes required to carry cabin crew as part of the operating crew, one universal precaution kit, and for aeroplanes authorized to carry more than 250 passengers, two universal precaution kits, for the use of cabin crew members in managing incidents of ill health associated with a case of suspected communicable disease, or in the case of illness involving contact with body fluids; and
  - (iii) for aeroplanes authorized to carry more than 100 passengers, on a sector length of more than two hours, a medical kit, for the use of medical doctors or other qualified persons in treating in-flight medical emergencies;
- (b) portable fire extinguishers of a type which, when discharged, does not cause dangerous contamination of the air within the aeroplane, and at least one extinguisher shall be located in the pilot's compartment and in each passenger compartment that is separate from the pilot's compartment and that is not readily accessible to the flight crew;

- (c) a seat or berth for each person over 2 years of age;
- (d) a seat belt for each seat and restraining belts for each berth;
- (e) a safety harness for each pilot seat, which shall incorporate a device which—
  - (i) automatically restrains the occupant's torso in the event of rapid deceleration;
  - (ii) prevents a suddenly incapacitated pilot from interfering with the flight controls;
- (f) means of ensuring that the following information and instructions are conveyed to the passengers—
  - (i) when seat belts are to be fastened;
  - (ii) when and how oxygen equipment is to be used, if the carriage of oxygen is required;
  - (iii) restrictions on smoking;
  - (iv) the location and use of life jackets or equivalent individual flotation devices where their carriage is required;
  - (v) the location and method of opening emergency exits; and
- (g) spare electrical fuses of appropriate ratings for replacement of those accessible in flight.

(3) Any agent used in a built-in fire extinguisher for each lavatory disposal receptacle for towels, paper or waste in an aeroplane shall—

- (a) meet the applicable minimum performance requirements of the State of Registry; and
- (b) not be of a type listed in the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer as it appears in the Eighth Edition of the Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer.

(4) Any extinguishing agent used in a portable fire extinguisher in an aeroplane shall—

- (a) meet the applicable minimum performance requirements of the State of Registry; and
- (b) not be of a type listed in the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer as it appears in the Eighth Edition of the Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer.

(5) An operator shall ensure that an aeroplane carries—

- (a) the operations manual prescribed in regulation 13(1), or those parts of it that pertain to flight operations;
- (b) the flight manual for the aeroplane, or other documents containing performance data and any other information necessary for the operation of the aeroplane within the terms of its certificate of airworthiness, unless these data are available in the operations manual; and
- (c) the current and relevant 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.

## **122. Marking of break-in points**

(1) If areas of the fuselage suitable for break-in by rescue crews in an emergency are marked on an aeroplane, such areas shall be marked as provided in the Civil Aviation (Instrument and Equipment) Regulation, 2020 and the color of the markings shall be red or yellow, and if necessary they shall be outlined in white to contrast with the background.

(2) If the corner markings are more than 2 m apart, intermediate lines 9 cm × 3 cm shall be inserted so that there is no more than 2 m between adjacent markings.

**123. Operator's continuing airworthiness responsibilities**

(1) Subject to procedures which are approved by the Authority, an operator shall ensure that—

- (a) each aeroplane operated by the operator is maintained in an airworthy condition;
- (b) the operational and emergency equipment necessary for an intended flight is serviceable; and
- (c) the certificate of airworthiness of each aeroplane of the operator is valid.

(2) An operator shall not operate an aeroplane unless it is maintained and released to service by an organisation approved in accordance with regulation 101 or under an equivalent system, which shall be acceptable to the Authority.

(3) An operator shall not operate an aeroplane unless the maintenance of the aeroplane, including any associated engine, propeller or part is carried out by—

- (a) an organisation approved by the Authority under the Civil Aviation (Aircraft Maintenance Organisation) Regulations 2020;
- (b) an organisation which is approved by another Contracting State and which is accepted by the Authority; or
- (c) a licensed aircraft maintenance engineer licensed in accordance with the Civil Aviation (Personnel Licensing) Regulations, 2020 and there is a maintenance release in relation to the maintenance carried out.

(4) Where the Authority accepts an equivalent system under subregulation (2), the person who signs the maintenance release shall be licensed in accordance with **Civil Aviation (Personnel Licensing) Regulations 2020**.

(5) An operator shall employ a qualified person or group of persons to ensure that the maintenance is carried out in accordance with the maintenance control manual.

(6) The operator shall ensure that the maintenance of its aeroplanes is performed in accordance with the Approved Maintenance Programme.

#### **124. Operator's maintenance control manual**

(1) The operator shall provide, for the use and guidance of the maintenance and operational personnel concerned, a maintenance control manual, which is approved to the Authority, in accordance with the requirements of these Regulations and the design of the manual shall observe human factors principles.

(2) The operator shall ensure that the maintenance control manual is amended as necessary to keep the information contained in the minima up to date.

(3) Copies of all amendments to the operator's maintenance control manual shall be furnished promptly to all organisations or persons to whom the manual is issued.

(4) The operator shall provide the Authority and the State of Registry with a copy of the operator's maintenance control manual, together with all amendments or revisions to it and shall incorporate in it the mandatory material which the Authority or the State of Registry may require.

#### **125. Maintenance programme**

(1) The operator shall provide, for the use and guidance of the maintenance and operational personnel concerned, a maintenance programme, approved by the Authority, containing the information required in these Regulations.

(2) The design and application of the operator's maintenance programme shall observe human factors principles.

(3) Copies of all amendments to the maintenance programme shall be furnished promptly to all organisations or persons to whom the maintenance programme is issued.

## **126. Continuing airworthiness records**

(1) The operator shall ensure that the following records are kept for the periods specified in these regulations—

- (a) records of the total time in service (hours, calendar time and cycles, as appropriate) of the aeroplane and all life-limited components;
- (b) records of the current status of compliance with all mandatory continuing airworthiness information;
- (c) records of appropriate details of modifications and repairs;
- (d) records of the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aeroplane or its components which are subject to a mandatory overhaul life;
- (e) records of the current status of the aeroplane's compliance with the maintenance programme; and
- (f) records of the detailed maintenance records to show that all requirements for the signing of a maintenance release are met.

(2) The records in subregulation (1) shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in subregulation (1)(f) shall be kept for a minimum period of one year after the signing of the maintenance release.

(3) In the event of a temporary change of an operator, the records shall be made available to the temporary operator.

(4) In the event of any permanent change of operator, the records shall be transferred to the new operator.

(5) The records kept and transferred in accordance with this regulation shall be maintained in a form and format that ensures readability, security and integrity of the records at all times.

### **127. Continuing airworthiness information**

The operator of an aeroplane of over 5 700 kg maximum certificated take-off mass shall—

- (a) monitor and assess the maintenance and operational experience with respect to continuing airworthiness and provide the information as prescribed by the State of Registry and make a report using the procedure in the **Civil Aviation (Airworthiness ) Regulation 2020**; and
- (b) obtain and assess information and recommendations on the continuing airworthiness of the aeroplane, available from the organisation responsible for the type design, and shall for the purpose and in accordance with the procedure acceptable to the State of Registry, implement any actions that may be considered necessary.

### **128. Modifications and repairs**

(1) All modifications and repairs of an aircraft shall comply with the airworthiness requirements acceptable to the Authority.

(2) An operator shall establish procedures which ensure that the substantiating data which supports compliance with the airworthiness requirements is retained.

### **129. Approved maintenance organisation**

An approved maintenance organisation shall comply with the **Civil Aviation (Aircraft Maintenance Organisation) Regulations 2020**.

### **130. Issue of approval**

(1) The approval of a maintenance organisation by a State shall be dependent upon the applicant demonstrating compliance with the requirements of regulation 65 and the relevant provisions contained in the safety management regulations for such organisations.



(2) The State shall for purposes of approval issue a document which shall contain—

- (a) the organisation's name and location;
- (b) the date of issue and period of validity; and
- (c) the terms of the approval.

(3) The continued validity of the approval shall depend upon an approved maintenance organisation remaining compliant with the requirements of regulation 65 and with the provisions in the **Civil Aviation (Safety Management) Regulations 2020**.

### **131. Maintenance organisations' procedures manuals**

(1) A maintenance organisation shall, for purposes of the use and guidance of the concerned maintenance personnel, provide a procedures manual containing—

- (a) a general description of the scope of work authorized under the organisation's terms of approval;
- (b) a description of the organisation's procedures and quality or inspection system which shall be in accordance with regulation 69;
- (c) a general description of the organisation's facilities;
- (d) the names and duties of the person or persons required by regulation 71;
- (e) a description of the procedures used to establish the competence of maintenance personnel as required by regulation 71;
- (f) a description of the method used for the completion and retention of the maintenance records required by regulation 72;
- (g) a description of the procedures for preparing the maintenance release and the circumstances under which the release is to be signed;

- (h) the personnel authorized to sign the maintenance release and the scope of their authorization;
- (i) a description, when applicable, of the additional procedures for complying with the operator's maintenance procedures and requirements;
- (j) a description of the procedures for complying with the service information reporting requirements of the **Civil Aviation (Aircraft Maintenance Organisation) Regulations 2020**; and
- (k) a description of the procedure for receiving, assessing, amending and distributing within the maintenance organisation, all the necessary airworthiness data from the type certificate holder or type design organisation.

(2) A procedure manual may be issued in separate parts.

(3) The maintenance organisation shall ensure that the procedures manual is amended as necessary to keep the information contained therein up to date.

(4) Copies of all amendments to the procedures manual shall be furnished promptly to all organisations or persons to whom the manual has been issued.

## **132. Safety management**

An approved maintenance organisation shall implement the provisions on safety management in the **Civil Aviation (Safety Management) Regulations 2020**.

## **133. Maintenance procedures and quality assurance system**

(1) A maintenance organisation shall establish procedures, acceptable to the Authority to ensure good maintenance practices and compliance with all the relevant requirements of these Regulation.

(2) The maintenance organisation shall ensure compliance with these regulations by either establishing an independent quality

assurance system to monitor compliance with the procedure and the adequacy of the procedures, or by providing a system of inspection to ensure that all maintenance is properly performed.

#### **134. Facilities**

(1) The facilities and working environment of a maintenance organisation shall be appropriate for the task to be performed.

(2) A maintenance organisation shall—

- (a) have the necessary technical data, equipment, tools and material to perform the work for which it is approved; and
- (b) have storage facilities for parts, equipment, tools and material and the conditions of storage shall be able to provide security and to prevent deterioration of and damage to the stored items.

#### **135. Personnel**

(1) A maintenance organisation shall nominate a person or group of persons whose responsibilities include ensuring that the maintenance organisation is in compliance with the requirements of regulation 65 for the approved maintenance organisation.

(2) The maintenance organisation shall employ the necessary personnel to plan, perform, supervise, inspect and release the work to be performed.

(3) The competence of maintenance personnel shall be established using the procedure and to a level acceptable to the Authority.

(4) A person who signs a maintenance release shall be qualified to do so under the personnel licensing regulations.

(5) The maintenance organisation shall ensure that all maintenance personnel receive initial and continuation training which shall be appropriate to their assigned tasks and responsibilities.

(6) The training programme established by the maintenance organisation shall include training in knowledge and skills related to

human performance, including coordination with other maintenance personnel and flight crew.

### **136. Records**

(1) The maintenance organisation shall retain detailed maintenance records to show that all the requirements for signing of maintenance releases are met.

(2) The maintenance records required by this regulation shall be kept for a minimum period of one year after the signing of the maintenance release.

### **137. Maintenance release**

(1) A maintenance release shall be completed and signed to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and the procedures described in the maintenance organisation's procedures manual.

(2) Where maintenance is carried out by an approved maintenance organisation, the maintenance release shall be issued by the approved maintenance organisation in accordance with the relevant provisions of the airworthiness of aircraft regulations.

(3) A maintenance release shall contain—

- (a) the basic details of the maintenance carried out, including a detailed reference of the approved data used;
- (b) the date the maintenance was completed;
- (c) where applicable, the identity of the approved maintenance organisation; and
- (d) the identity of the qualified person or persons who signed the release.

(4) Where maintenance is not carried out by an approved maintenance organisation, the maintenance release shall be completed and signed by a person appropriately licensed in accordance with

personnel licensing regulations to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and procedures acceptable to the Authority.

(5) Where maintenance is not carried out by an approved maintenance organisation, the maintenance release shall include -

- (a) the basic details of the maintenance carried out including a detailed reference of the approved data used;
- (b) the date the maintenance was completed; and
- (c) the identity of the qualified person or persons signing the release.

## PART VII—AEROPLANE FLIGHT CREW

### **138. Composition of the flight crew**

(1) The number and composition of the flight crew shall not be less than the number specified in the operations manual.

(2) Where necessitated by considerations related to the type of aeroplane used, the type of operation involved and the duration of flight between points where flight crew is changed, the flight crew shall include flight crew members in addition to the minimum numbers specified in the flight manual or other documents associated with the certificate of airworthiness.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **139. Radio operator**

The flight crew shall include at least one member who holds a valid license, issued or rendered valid by the State of Registry, authorizing operation of the type of radio transmitting equipment to be used.

#### **140. Flight engineer**

When a separate flight engineer's station is incorporated in the design of an aeroplane, the flight crew shall include at least one flight engineer especially assigned to that station, unless the duties associated with that station can be satisfactorily performed by another flight crew member, holding a flight engineer license, without interference with the regular duties of that flight crew member.

#### **141. One pilot qualified to perform flight engineer functions**

An air operator certificate holder shall ensure that, on all flights which require a flight engineer, there is assigned at least one other flight crew member qualified to perform the flight engineer duties in the event the flight engineer becomes incapacitated.

#### **142. Flight crew member emergency duties**

(1) The operator shall, for each type of aeroplane, assign to all flight crew members the necessary functions they are to perform in an emergency or in a situation that requires emergency evacuation.

(2) An operator's training programme shall contain the annual training to be undertaken to accomplish the functions of the flight crew and the programme shall include instruction in the use of all emergency and life-saving equipment required to be carried and the drills to be undertaken in the emergency evacuation of the aeroplane.

#### **143. Flight crew member training programmes**

(1) The operator shall establish and maintain a ground and flight training programme, which shall be approved by the Authority, and the operator shall ensure that all flight crew members are adequately trained to perform their assigned duties.

(2) The training programme shall have ground and flight training facilities and properly qualified instructors as may be determined by the Authority.

(3) The training programme shall—

- (a) consist of ground and flight training in the type of aeroplane on which the flight crew member serves;
- (b) include proper flight crew coordination and training in all types of emergency and abnormal situations or procedures caused by engine, airframe or systems malfunctions, fire or other abnormalities;
- (c) include upset prevention and recovery training;
- (d) include training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, charting, human performance including threat and error management and in the transport of dangerous goods;
- (e) ensure that all flight crew members know the functions for which they are responsible and the relation of these functions to the functions of other crew members, particularly in regard to abnormal or emergency procedures; and
- (f) be undertaken on a recurrent basis, as may be determined the Authority and shall include an assessment of competence.

(4) The requirement for recurrent flight training in a particular type of aeroplane shall be considered fulfilled by—

- (a) the use, to the extent deemed feasible by the Authority, of flight simulation training devices approved by the Authority for that purpose; or
- (b) the completion within the appropriate period of the proficiency check required by regulation 155 in that type of aeroplane.

#### **144. Duties during critical phases of flight**

A flight crew member shall not—

- (a) perform any duties during a critical phase of flight except duties required for the safe operation of the aircraft; or

- (b) engage in any activity during a critical phase of flight which may distract or interfere with the performance of that flight crew member's assigned duties.

#### **145. Manipulation of the controls**

(1) A pilot in command (PIC) shall not allow an unqualified person to manipulate the controls of an aircraft during commercial air transport operations.

(2) A person shall not manipulate the controls of an aircraft during commercial air transport operations unless the person is qualified to manipulate the controls and is authorised to do so by the air operator certificate holder.

#### **146. Power to inspect**

(1) The pilot in command (PIC) shall give an inspector free and uninterrupted access to the aircraft including the cockpit, in order to conduct an inspection and the inspector shall for this purpose, presents valid aviation safety inspector credentials to the pilot in command (PIC).

(2) The pilot in command (PIC) may refuse an inspector access to the cockpit if, in his or her opinion, the safety of the aircraft may be endangered.

#### **147. Recent experience - pilot-in-command and co-pilot**

(1) An operator shall not assign a pilot as a pilot-in-command or a co-pilot, to operate at the flight controls of a type or variant of a type, of aeroplane during take-off and landing unless that pilot operated the flight controls during, at least three take-offs and landings, within the preceding 90 days, on the same type of aeroplane or in a flight simulator approved for the purpose.

(2) Where a pilot-in-command or a co-pilot is flying, several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide the conditions the requirements



of this regulation for each variant or each type of aeroplane may be combined under which.

(3) The take-offs and landings required by subregulation (1) may be performed in a visual synthetic flight trainer approved by the Authority to include take-off and landing manoeuvres and any person who fails to make the three required take-offs and landings within a consecutive ninety-day period shall re-establish recency of experience as specified in subregulation (4).

(4) In addition to meeting all the applicable training and checking requirements of these Regulations, a flight crew member who has not met the requirements of subregulation (1) shall re-establish recency of experience under the supervision of a check pilot, by making at least three take-offs and landings in the type of aircraft in which that person is to serve or if an advanced synthetic flight trainer is used, by meeting the requirements of subregulation (4).

(5) The take-offs and landings required under subregulation (4) shall include—

- (a) at least one take-off with a simulated failure of the most critical engine;
- (b) at least one landing from an instrument landing system approach to the lowest instrument landing system minimum authorized for the certificate holder; and
- (c) at least one landing to a full stop.

(6) A required flight crew member who performs the manoeuvres prescribed in subregulation (3) in a visual synthetic flight trainer shall—

- (a) have previously logged one hundred hours of flight time in the same aircraft type in which the pilot is to serve; and
- (b) be observed on the first two landings made in operations under this Part by an approved check pilot who acts as pilot-in-command and occupies a pilot seat and the

landings shall be made in weather minima that are not less than those contained in the air operator certificate (AOC) holder's operation specifications for category I operations, and shall be made within forty five days following completion of synthetic flight trainer training.

(7) When using a synthetic flight trainer to accomplish any of the requirements of subregulation (1) or (3), a required flight crew member position shall be operated as if in a normal in-flight environment without use of the repositioning features of the synthetic flight trainer.

(8) A check pilot who observes the take-offs and landings prescribed in subregulation (4)(a) and (6) shall certify that the person being observed is proficient and qualified to perform flight duty in operations under this Part and may require any additional manoeuvres that are determined necessary to make this certifying statement.

(9) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

#### **148. Pilot operating limitations and pairing requirements**

(1) Where a co-pilot has fewer than one hundred hours of flight time as co-pilot in operations in the aircraft type being flown, and the pilot-in-command (PIC) is not an appropriately qualified check pilot, the pilot in command (PIC) shall make all take-offs and landings in special airports designated by the Authority or special airports designated by the air operator certificate (AOC) holder in any of the following conditions—

- (a) the prevailing visibility value in the latest weather report for the airport is at or below 1200 m;
- (b) the runway visual range (RVR) for the runway to be used is at or below 4,000 feet;
- (c) the runway to be used has water, snow, slush or similar conditions that may adversely affect aircraft performance;

- (d) the braking action on the runway to be used is reported to be less than “good”;
- (e) the crosswind component for the runway to be used is in excess of 15 knots;
- (f) wind shear is reported in the vicinity of the airport; or
- (g) any other condition in which the pilot in command (PIC) determines it to be prudent to exercise his or her prerogative.

(2) A person shall not conduct operations under the **Civil Aviation (Air Operator Certification and Administration) Regulations 2020** unless, for that type aircraft, either the pilot in command (PIC) or the co-pilot has at least seventy five hours of line operating flight time, either as pilot in command (PIC) or co-pilot.

(3) The Authority may, upon application by the air operator certificate (AOC) holder, authorize exemptions from the requirements of this regulation by an appropriate amendment to the operations specifications, under any of the following circumstances—

- (a) a newly certificated air operator certificate (AOC) holder does not employ any pilots who meet the minimum requirements of this regulation;
- (b) an air operator certificate (AOC) holder adds to its fleet an aircraft type which has not been proven for use in its operations; or
- (c) an air certificate operator (AOC) holder establishes a new domicile to which it assigns pilots who will be required to become qualified on the aircraft operated from that domicile.

#### **149. Recent experience - cruise relief pilot**

(1) An operator shall not assign a pilot to act in the capacity of cruise relief pilot in a type or variant of a type of aeroplane unless, within the preceding 90 days that pilot—

- (a) operated as a pilot-in-command, co-pilot or cruise relief pilot on the same type of aeroplane; or
- (b) carried out flying skill refresher training including normal, abnormal and emergency procedures which are specific to cruise flight on the same type of aeroplane or in a flight simulator approved for the purpose, and has practiced approach and landing procedures, where the approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane.

(2) When a cruise relief pilot is flying several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide the conditions under which the requirements of these regulations for each variant or each type of aeroplane may be combined.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

#### **150. Pilot-in-command area, route and aerodrome qualification**

(1) An operator shall not utilize a pilot as pilot-in-command of an aeroplane on a route or route segment for which that pilot is not currently qualified until the pilot qualifies under this regulation.

(2) A pilot referred to in subregulation (1) shall demonstrate to the operator an adequate knowledge of—

- (a) the route to be flown, and the aerodromes which are to be used, including knowledge of—
  - (i) the terrain and minimum safe altitudes;

- (ii) the seasonal meteorological conditions;
  - (iii) the meteorological, communication and air traffic facilities, services and procedures;
  - (iv) the search and rescue procedures; and
  - (v) the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place;
- (b) The procedures applicable to the flight paths over heavily populated areas and areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, and the applicable operating minima.

(3) The portion of the demonstration relating to arrival, departure, holding and instrument approach procedures required under subregulation (2) that may be accomplished in an appropriate training device which is adequate for this purpose.

(4) For the purpose of this regulation, a pilot-in-command shall have made an actual approach into each aerodrome of landing on the route, accompanied by a pilot who is qualified for the aerodrome, as a member of the flight crew or as an observer on the flight deck, unless-

- (a) the approach to the aerodrome is not over difficult terrain and the instrument approach procedures and aids available are similar to those with which the pilot is familiar, or there is reasonable certainty that approach and landing can be made in visual meteorological conditions;
- (b) the descent from the initial approach altitude can be made by day in visual meteorological conditions;
- (c) the operator qualifies the pilot-in-command to land at the aerodrome concerned by means of an adequate pictorial presentation; or
- (d) the aerodrome concerned is adjacent to another aerodrome at which the pilot-in-command is currently qualified to land.

(5) For the purposes of subregulation 4 (a), and a margin shall be added to the normal operating minima and this shall be approved by the Authority.

(6) The operator shall maintain a record, sufficient to satisfy the Authority of the qualification of the pilot and of the manner in which the qualification is achieved.

(7) The operator shall not utilize a pilot as a pilot-in-command on a route or within an area specified by the operator and approved by the Authority unless, within the preceding 12 months, that pilot made at least one trip as a pilot or as a check pilot, or as an observer in the flight crew compartment—

- (a) within that specified area; and
- (b) if appropriate, on any route where the procedures associated with that route or with any aerodromes intended to be used for take-off or landing require the application of special skills or knowledge.

(8) Where a pilot-in-command has not, in a period of 12 months, made a trip on a route in close proximity and over similar terrain, within a specified area, route or aerodrome, and has not practiced the procedures in a training device which is adequate for the purpose, the pilot shall, prior to again serving as a pilot-in-command within that area or on that route, qualify under the requirements of this regulation.

(9) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **151. Pilot in command (PIC) aeronautical experience - small aircraft**

(1) An operator shall ensure that a commercial pilot licence holder does not operate as a pilot-in command (PIC) for single pilot operations which are certificated as such in the aircraft flight manual unless—

- (a) when conducting passenger carrying operations under visual flight rules outside a radius of 50 nm from an aerodrome of departure, the pilot has a minimum of 500 hours total flight time on aeroplanes or holds a valid instrument rating; or
- (b) when operating on a multi-engine type under instrument flight rules (IFR), the pilot has a minimum of 700 hours total flight time on aeroplanes which includes 400 hours as pilot in command (PIC) of which 100 hours have been under instrument flight rules (IFR) including 40 hours multi-engine operation.

(2) The 400 hours referred to subregulation (1) (b) may be substituted by the hours the commercial pilot licence (CPL) holder operates as co-pilot on the basis that two hours as co-pilot is equivalent to one hour as pilot in command (PIC), provided that those hours were gained within an established multi-pilot crew system prescribed in the operations manual as specified in the **Civil Aviation (Air Operator Certification and Administration) Regulations 2020**.

(3) In addition to subregulation (1)(b) the operators shall ensure that when operating under instrument flight rules (IFR) as a single pilot, the requirements prescribed in regulation 157 are satisfied and that in multi-pilot crew operations, in addition to subregulation (1) and prior to the pilot operating as pilot in command (PIC), the command course prescribed in the operations manual specified in the **Civil Aviation (Air Operator Certification and Administration) Regulations 2020** is completed.

## **152. Co-pilot licence requirements**

A pilot shall not act as co-pilot of an aircraft in commercial air transport operations unless that pilot holds—

- (a) a commercial pilot licence with the appropriate category class and type ratings for the aircraft operated; and
- (b) an instrument rating.

### **153. Pilot age restriction**

(1) A person shall not serve as, and an air operator certificate holder shall not use a person as, a required pilot on an aircraft engaged in international commercial air transport operations if that person has attained the age of sixty five years.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **154. Pilot in command (PIC) licence requirements - turbojet, turboprop or large aircraft**

(1) A pilot shall not act as a pilot-in-command of a turbojet, turboprop or large aircraft in commercial air transport operations unless that pilot holds an Airline Transport Pilot Licence and a type rating for that aircraft.

(2) A pilot shall not act as a pilot-in-command of a non-turbojet or turboprop small aircraft in commercial air transport operations during—

- (a) instrument flight rules operations unless that pilot holds a Commercial Pilot Licence (CPL) with appropriate category class ratings for the aircraft operated and an instrument rating and meets the experience requirements for operation; or
- (b) day visual flight rule operations unless that pilot holds a Commercial Pilot Licence with appropriate category and class ratings for the aircraft operated.

### **155. Pilot proficiency checks**

(1) The operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence on each type of aeroplane or variant of a type of aeroplane.

(2) Where the operation may be conducted under instrument flight rules, the operator shall ensure that the pilot's competence to



comply with the rules is demonstrated to either a check pilot of the operator or a representative of the Authority.

(3) Pilot proficiency checks shall be performed twice within any period of one year.

(4) Any two pilot proficiency checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.

(5) The flight simulation training devices which are approved by the Authority may be used for those parts of the checks for which they are specifically approved.

(6) Where the operator schedules flight crew on several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the Authority shall determine the conditions under which the requirements of this regulation for each variant or each type of aeroplane may be combined.

(7) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points or to imprisonment not exceeding one year or both.

## **156. Single pilot operations under the instrument flight rules (IFR) or at night**

(1) An operator shall comply with the prescribed requirements of experience, recency and training which are applicable to single pilot operations intended to be carried out under the instrument flight rules (IFR) or at night.

(2) The pilot-in-command shall—

- (a) for operations under the instrument flight rules (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 pilot-in-command;

- (b) for operations under the instrument flight rules (IFR), have accumulated at least 25 hours flight time under the instrument flight rules (IFR) on the class of aeroplane, which may form part of the 50 hours flight time in paragraph (a);
- (c) for operations at night, have accumulated at least 15 hours flight time at night, which may form part of the 50 hours flight time in paragraph (a);
- (d) for operations under the instrument flight rules (IFR), have acquired recent experience as a pilot engaged in a single pilot operation under the instrument flight rules (IFR) of -
  - (i) at least five IFR flights, including three instrument approaches carried out during the preceding 90 days on the class of aeroplane in the single pilot role; or
  - (ii) an instrument flight rules (IFR) instrument approach check carried out on the class of aeroplane in the single pilot role during the preceding 90 days;
- (e) for operations at night, have made at least [three take-offs and landings at night] on the class of aeroplane in the single pilot role in the preceding 90 days; and
- (f) have successfully completed training programmes that include, in addition to the requirements of regulation 190, passenger briefing with respect to emergency evacuation, autopilot management, and the use of simplified in-flight documentation.

(3) The initial and recurrent flight training and proficiency checks indicated in regulations 155 and 190 shall be undertaken by the pilot-in-command in the single pilot role on the class of aeroplane in an environment representative of the operation.

### **157. Pilot authorization in lieu of a type rating.**

The Authority may authorise a pilot to operate an aircraft requiring a type rating without a type rating for a period not exceeding sixty days, provided that—

- (a) the applicant demonstrates to the satisfaction of the Authority that an equivalent level of safety can be achieved through the operating limitations on the authorisation;
- (b) the applicant shows that compliance with these Regulations is impracticable for the flight or series of flights; and
- (c) the operations—
  - (i) involve only ferry flight, training to qualify on type or test flight;
  - (ii) are within Uganda, unless, by previous agreement with the Authority, the aircraft is flown to an adjacent Contracting State for maintenance;
  - (iii) are not for compensation or hire unless the compensation or hire involves payment for the use of the aircraft for training; and
  - (iv) involve only the carriage of flight crew members considered essential for the flight.

### **158. Licences required**

(1) A person shall not act as pilot-in-command or in any other capacity as a required flight crew member of an aircraft—

- (a) registered in Uganda, unless that person carries in his or her personal possession the appropriate and current licence for that flight crew position for that type of aircraft; or
- (b) of foreign registry, unless that person carries in his or her personal possession a valid and current licence for that type of aircraft issued to that person, by the State of Registry.

(2) The flight crew for international and domestic operations shall hold a valid radio telephone operator licence or an endorsement issued or rendered valid by the State of Registry, authorizing operation of the type of radio transmitting equipment to be used.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **159. Pilots - qualifications**

(1) A person shall not operate an aircraft in commercial air transport or aerial work unless that person is qualified for the specific operation and in the specific type of aircraft used.

(2) An operator or owner of an aircraft shall ensure that the flight crew engaged in civil aviation operations speak and understand English.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **160. Fitness of crew members**

(1) A person shall not execute the duties of a crew member at any time when that person is aware of any decrease in his or her medical fitness which might render him or her unable to safely and properly execute the duties of a crew member.

(2) The operator and the pilot in command (PIC) shall be responsible for ensuring that a flight is not—

- (a) commenced if any crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue or the effects of alcohol or drugs; or
- (b) continued beyond the nearest suitable aerodrome if a flight crew member's capacity to execute duties as a flight crew member is significantly reduced by impairment of his or her faculties from causes such as fatigue, sickness or lack of oxygen.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

#### **161. Special authorization required for category II or category III operations**

(1) A person shall not act as a pilot of an aircraft in a Category II or Category III operations unless—

- (a) in the case of a pilot-in-command, the person holds a current Category II or Category III pilot authorisation for that aircraft type; or
- (b) in the case of a co-pilot, the person is authorised by the State of Registry to act in that capacity in that aircraft in Category II or Category III operations.

(2) Authorisation of the individual pilots of an air operator certificate (AOC) holder is not required for Category II or Category III operations.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding one hundred currency points or to imprisonment not exceeding two years, or both.

#### **162. Recording of flight time**

(1) A pilot shall record and keep details of all flights he or she has flown in a logbook format acceptable to the Authority.

(2) An air operator certificate (AOC) holder—

- (a) may record and maintain details of the flights flown by a pilot of the air operator certificate (AOC) holder, in an acceptable computerized format; and
- (b) shall make the records of all the flights operated by the pilot, including differences and familiarisation training, available to the pilot concerned where the pilot so requests.

(3) The record referred to in subregulation (1) and (2) shall contain —

- (a) the personal details of the pilot including the name and address of the pilot;
- (b) for each flight—
  - (i) the name of the pilot in command (PIC);
  - (ii) the date, (day, month and year) of the flight;
  - (iii) the place and time of departure and arrival and the times shall be UTC and block to block;
  - (iv) the type, make, model and variant, and registration of the aircraft;
  - (v) whether the aircraft is single engine or multi-engine;
  - (vi) the total time of the flight; and
  - (vii) the accumulated total time of the flight;
- (c) for each synthetic flight trainer or flight and navigation procedures trainers session—
  - (i) the type and qualification number of the training device;
  - (ii) the synthetic training device instruction;
  - (iii) the date, month and year of the training session;
  - (iv) the total time of the session; and
  - (v) the accumulated total time of the session;
- (d) for the pilot function—
  - (i) the pilot in command (PIC),
  - (ii) the co-pilot;
  - (iii) both the pilot in command and the co-pilot;
  - (iv) the authorised instructor or authorised examiner;
  - (v) a remarks column for the details of the specific functions such as, student pilot in command (PIC)

- time, pilot in command (PIC) under supervision time, pilot in command (PIC) instrument flight time, etc;
- (e) the operational conditions at night or for instrument flight rules, as the case may be;
- (4) The logging of time shall include—
- (a) for pilot in command (PIC) flight time, where—
- (i) the holder of a licence may log as pilot in command (PIC) time all of the flight time during which he or she is the pilot in command (PIC);
  - (ii) the applicant for or the holder of a pilot licence may log as pilot in command (PIC) time all solo flight time and flight time as student pilot in command (PIC) provided that the student pilot in command (PIC) time is countersigned by the instructor;
  - (iii) the holder of an instructor rating may log as pilot in command (PIC) all flight time during which he or she acts as an instructor in an aeroplane;
  - (iv) the holder of an examiner's authorisation may log as pilot in command (PIC) all flight time during which he or she occupies a pilot's seat and acts as an examiner in an aeroplane;
  - (v) a co-pilot acting as pilot in command (PIC) under the supervision of the pilot in command (PIC) on an aeroplane on which more than one pilot is required under the certificate of airworthiness of the aeroplane or by these Regulations may log as pilot in command (PIC) under supervision flight time, provided such pilot in command (PIC) time under supervision is countersigned by the pilot in command (PIC);
  - (vi) the holder of a licence carries out a number of flights on the same day returning on each occasion to the same place of departure and where the interval

between the successive flights does not exceed thirty minutes, in this case the series of flights shall be recorded as a single entry;

- (b) for co-pilot flight time, the holder of pilot licence occupying a pilot seat as co-pilot may log all flight time as co-pilot flight time on an aeroplane on which more than one pilot is required under the certificate of airworthiness of the aeroplane;
- (c) for cruise relief co-pilot flight time, a cruise relief co-pilot may log all flight time as co-pilot when occupying a pilot's seat;
- (d) for instruction time, a summary of all time logged by an applicant for a licence or rating as flight instruction, instrument flight instruction, instrument ground time, which shall be certified by the appropriately rated or authorised instructor from whom it is received;
- (e) for a pilot in command (PIC) under supervision, a co-pilot may log as a pilot in command (PIC) under supervision flight time flown as pilot in command (PIC) under supervision, when all of the duties and functions of a pilot in command (PIC) on that flight were carried out, such that the intervention of the pilot in command (PIC) in the interest of safety was not required, provided that the method of supervision is acceptable to the Authority.

(5) A holder of a licence or a student pilot shall without undue delay present his or her flight time record for inspection upon request by an authorised person and a student pilot shall for purposes of proving that he or she has the required instructor authorization, carry his or her flight time record logbook with him or her on all solo cross-country flights;

(6) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.



### **163. Completion of the technical logbook**

A pilot-in-command shall ensure that all portions of the technical logbook required under the **Civil Aviation (Air Operator Certification and Administration) Regulations 2020**, are completed at the appropriate points before, during and after flight operations.

### **164. Reporting mechanical irregularities**

A pilot-in-command shall ensure that all the mechanical irregularities that occur during flight time are—

- (a) reported to the operator at the termination of the flight;
- (b) for general aviation operations, entered in the aircraft logbook and dealt with in accordance with the minimum equipment list (MEL) or other approved or prescribed procedure; and
- (c) for commercial air transport operations, entered in the technical log of the aircraft at the end of that flight time.

### **165. Reporting of facility and navigation aid inadequacies**

(1) An operator shall report, without delay, any inadequacy or irregularity of a facility or navigational aid observed in the course of operations, to the person responsible for that facility or navigational aid.

(2) Subject to their published conditions of use, aerodromes and their facilities shall be kept continuously available for flight operations during their published hours of operations, irrespective of weather conditions.

### **166. Pilot privileges and limitations**

(1) A pilot shall not conduct flight operations unless the operations are within the privileges and limitations of each licence he or she holds as specified in the **Civil Aviation (Personnel Licensing) Regulations 2020**.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding fifty currency points to imprisonment not exceeding one year or both.

### **167. Flight crew equipment**

A flight crew member assessed as fit to exercise the privileges of a license, subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.

### **168. Crew resource management training**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a crew member or flight operations officer unless that person has completed the initial crew resource management (CRM) curriculum which shall be approved by the Authority.

(2) An air operator certificate (AOC) holder shall ensure that all crew members have crew resource management training as part of their initial and recurrent training requirements.

(3) A crew resource management training program shall include—

- (a) an initial indoctrination or awareness segment;
- (b) a method to provide recurrent practice and feedback; and
- (c) a method of providing continuing reinforcement.

(4) The curriculum topics to be contained in an initial crew resource management training course include—

- (a) communications processes and decision behaviour;
- (b) internal and external influences on interpersonal communications;
- (c) barriers to communication;
- (d) listening skills;

- (e) decision making skills;
- (f) effective briefings;
- (g) developing open communications;
- (h) inquiry, advocacy, and assertion training;
- (i) crew self-critique;
- (j) conflict resolution;
- (k) team building and maintenance;
- (l) leadership and fellowship training;
- (m) interpersonal relationships;
- (n) workload management;
- (o) situational awareness;
- (p) how to prepare, plan and monitor task completions;
- (q) workload distribution;
- (r) distraction avoidance;
- (s) individual factors; and
- (t) stress reduction.

## **169. Initial emergency equipment drills**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a crew member unless that person has completed the appropriate initial emergency equipment curriculum and drills for the crew member position, for the emergency equipment available on the aircraft to be operated, which shall be approved by the Authority.

(2) A crew member shall complete emergency training during the specified training periods, using the items of emergency equipment installed in the type of aircraft in which that crew member is to serve.

(3) During initial training, a crew member shall perform the following onetime emergency drills-

- (a) protective breathing equipment or fire-fighting drill which shall include—
  - (i) locating the source of fire or smoke for an actual or simulated fire;
  - (ii) implementing procedures for effective crew co-ordination and communication, including notification of flight crew members about fire situation;
  - (iii) donning and activating installed protective breathing equipment or approved protective breathing equipment simulation device;
  - (iv) manoeuvring in limited space with reduced visibility;
  - (v) effectively using the aircraft's communication system;
  - (vi) identifying the class of fire;
  - (vii) selecting the appropriate extinguisher;
  - (viii) properly removing the extinguisher from the securing device;
  - (ix) preparing, operating and discharging the extinguisher properly; and
  - (x) utilising the correct fire-fighting techniques for the type of fire; and
- (b) emergency evacuation drill which shall include—
  - (i) recognising and evaluating an emergency;
  - (ii) assuming the appropriate protective position;
  - (iii) commanding passengers to assume protective positions;
  - (iv) implementing crew co-ordination procedures;
  - (v) ensuring activation of emergency lights;

- (vi) assessing aircraft condition;
- (vii) initiating evacuation, dependent on signal or decision;
- (viii) commanding of passengers to release their seatbelts and evacuate;
- (ix) assessing exit and redirect passengers, if necessary, to open exits, including deploying slides and commanding helpers to assist;
- (x) commanding the passengers to evacuate at exit and to run away from the aircraft;
- (xi) assisting special need passengers, such as the handicapped, elderly, and persons in a state of panic; and
- (xii) actually exiting the aircraft or training device using any of the installed emergency evacuation slides.

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

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

- (a) emergency exit drill, which shall include—
  - (i) correctly pre-flighting each type of emergency exit and evacuation slide or slide raft, if part of cabin crew member's assigned duties;
  - (ii) disarming and opening each type of door exit in normal mode;
  - (iii) closing each type of door exit in normal mode;
  - (iv) arming each type of door exit in emergency mode;
  - (v) opening each type of door exit in emergency mode;

- (vi) using the manual slide inflation system to accomplish or ensure slide or slide raft inflation;
  - (vii) opening each type of window exit;
  - (viii) removing the escape rope and positioning it for use;
- (b) hand fire extinguisher drill fighting, where the use of an actual or a simulated fire is not necessary during this drill, and which shall include—
  - (i) pre-fighting each type of hand fire extinguisher;
  - (ii) locating the source of fire or smoke and identify class of fire;
  - (iii) selecting the appropriate extinguisher and removing it from securing device;
  - (iv) preparing the extinguisher for use;
  - (v) actually operating and discharging each type of installed hand fire extinguisher;
  - (vi) utilising correct fire-fighting techniques for the type of fire; and
  - (vii) implementing procedures for effective crew coordination and communication, including notification of crew members about the type of fire situation;
- (c) emergency oxygen system drill, which shall include—
  - (i) actually operating portable oxygen bottles, including masks and tubing;
  - (ii) verbally demonstrating operation of chemical oxygen generators;
  - (iii) preparing for use and properly operating oxygen devices, including donning and activation;
  - (iv) administering oxygen to self, passengers, and to those persons with special oxygen needs;
  - (v) utilising proper procedures for effective crew coordination and communication;

- (vi) activating protective breathing equipment;
  - (vii) manually opening each type of oxygen mask compartment and deploying oxygen masks;
  - (viii) identifying compartments with extra oxygen masks;
  - (ix) implementing immediate action decompression procedures; and
  - (x) resetting the oxygen system, if applicable;
- (d) flotation device drill, which shall include—
- (i) donning and inflating life vests;
  - (ii) removing and using flotation seat cushions; and
  - (iii) demonstrating swimming techniques using a seat cushion;
- (e) ditching drills, if applicable, during which ditching drill trainees shall perform the “prior to impact” and “after impact” procedures for a ditching, as may be appropriate to the specific operator’s type of operation and which shall include—
- (i) implementing crew coordination procedures, including a briefing with the captain to obtain pertinent ditching information and briefing cabin crew members;
  - (ii) coordinating time-frame for cabin and passenger preparation;
  - (iii) adequately briefing passengers on ditching procedures;
  - (iv) ensuring the cabin is prepared, including the securing of carry-on baggage, lavatories, and galleys;
  - (v) demonstrating how to properly deploy and inflate slide rafts;
  - (vi) removing, positioning and attaching slide rafts to aircraft;

- (vii) inflating the rafts;
- (viii) using escape ropes at over wing exits;
- (ix) commanding any helpers to assist;
- (x) using slides and seat cushions as flotation devices;
- (xi) removing appropriate emergency equipment from the aircraft;
- (xii) boarding rafts properly;
- (xiii) initiating raft management procedures, such as disconnecting rafts from aircraft, applying immediate first aid, rescuing persons in water, salvaging floating rations and equipment, deploying sea anchor, tying rafts together, and activating or ensuring operation of emergency locator transmitter;
- (xiv) initiating basic survival procedures, such as removing and utilising survival kit items, repairing and maintaining raft, ensuring protection from exposure, erecting canopy, communicating location, providing continued first aid, and providing sustenance;
- (xv) using heaving line to rescue persons in water;
- (xvi) tying slide rafts or rafts together;
- (xvii) using life line on edge of slide raft or raft as a handhold; and
- (xviii) securing survival kit items.

(6) An aircraft crew member shall accomplish additional emergency drill requirements during initial and recurrent training including observing the following emergency drills—

- (a) life raft removal and inflation drill, if applicable including —
  - (i) removal of a life raft from the aircraft or training device; and



- (ii) inflation of a life raft;
- (b) slide raft transfer drills including—
  - (i) transferring each type of slide raft pack from an unusable door to a usable door;
  - (ii) disconnecting the slide raft at an unusable door;
  - (iii) redirecting passengers to the usable slide raft; and
  - (iv) installing and deploying the slide raft at a usable door;
- (c) slide and slide raft deployment, inflation, and detachment including—
  - (i) engaging slide girt bar in floor brackets;
  - (ii) inflating slides with and without quick-release handle, manually and automatically;
  - (iii) disconnecting slide from aircraft for use as a flotation device;
  - (iv) arming slide rafts for automatic inflation; and
  - (v) disconnecting slide raft from the aircraft; and
- (d) emergency evacuation slide drill including—
  - (i) opening armed exit with slide or slide raft deployment and inflation; and
  - (ii) egressing from aircraft via the evacuation slide and running away to a safe distance.

## **170. Initial aircraft ground training- flight crew**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight crew member unless that person completes the initial aircraft ground training for the aircraft type approved by the Authority.

(2) Initial aircraft ground training for flight crew members shall include the relevant provisions of the operations manual which relate to aircraft-specific performance, mass and balance, operational policies, systems, limitations, normal, abnormal and emergency procedures for the aircraft type to be used.

(3) An air operator certificate (AOC) holder shall have an initial aircraft ground training curriculum for the flight crew which shall be applicable to the type of operations conducted and aircraft flown.

(4) Instructions shall include the following general subjects—

- (a) air operator certificate (AOC) holder's dispatch, flight release, or operational control or flight following procedures;
- (b) principles and methods for determining mass and balance, and runway limitations for take-off;
- (c) adverse weather recognition and avoidance, and flight procedures to be followed when operating under the following conditions—
  - (i) icing;
  - (ii) fog;
  - (iii) turbulence;
  - (iv) heavy precipitation;
  - (v) thunderstorms;
  - (vi) low-level wind shear and microburst;
  - (vii) low visibility;
- (d) normal and emergency communications procedures and navigation equipment including the air operator certificate (AOC) holder's communications procedures and air traffic control clearance requirements;

- (e) navigation procedures used in area departure, en route, area arrival, approach and landing phases;
- (f) approved crew resource management (CRM) training;
- (g) air traffic control systems, procedures, and phraseology;
- (h) aircraft performance characteristics during all flight regimes, including—
  - (i) the use of charts, tables, tabulated data and other related manual information;
  - (ii) normal, abnormal, and emergency performance problems;
  - (iii) meteorological and weight limiting performance factors, such as temperature, pressure, contaminated runways, precipitation, climb and runway limits;
  - (iv) inoperative equipment performance limiting factors, such as minimum equipment list or configuration deviation list, inoperative antiskid; and
  - (v) special operational conditions, such as unpaved runways, high altitude aerodromes and drift down requirements.

(5) An air operator certificate (AOC) holder shall have an initial aircraft ground training curriculum for the flight crew which shall be applicable to the type of operations conducted and aircraft flown, and which shall include at least the following aircraft systems—

- (a) aircraft, which shall include—
  - (i) aircraft dimensions, turning radius, panel layouts, cockpit and cabin configurations; and
  - (ii) other major systems and components or appliances of the aircraft;
- (b) power plants, which shall include—

- (i) basic engine description;
  - (ii) engine thrust ratings; and
  - (iii) engine components such as accessory drives, ignition, oil, fuel control, hydraulic, and bleed air features;
- (c) electrical, which shall include—
  - (i) sources of aircraft electrical power, such as engine driven generators, auxiliary power unit (APU) generator, and external power;
  - (ii) electrical buses;
  - (iii) circuit breakers;
  - (iv) aircraft battery; and
  - (v) standby power systems;
- (d) hydraulic, which shall include—
  - (i) hydraulic reservoirs, pumps, accumulators, filters, check valves, interconnects and actuators; and
  - (ii) other hydraulically operated components;
- (e) fuel, which shall include—
  - (i) fuel tanks, including location and quantities;
  - (ii) engine driven pumps;
  - (iii) boost pumps;
  - (iv) system valves and crossfeeds;
  - (v) quantity indicators; and
  - (vi) provisions for fuel jettisoning;
- (f) pneumatic, which shall include—
  - (i) bleed air sources, auxiliary power unit or external ground air; and

- (ii) means of routing, venting and controlling bleed air via valves, ducts, chambers, and temperature and pressure limiting devices;
- (g) air conditioning and pressurisation, which shall include—
  - (i) heaters, air conditioning packs, fans, and other environmental control devices;
  - (ii) pressurisation system components such as outflow and negative pressure relief valves; and
  - (iii) automatic, standby, and manual pressurisation controls and annunciations;
- (h) flight controls, which shall include—
  - (i) primary controls, including yaw, pitch, and roll devices;
  - (ii) secondary controls, including leading or trailing edge devices, flaps, trim, and damping mechanisms;
  - (iii) means of actuation, whether direct or indirect or fly by wire; and
  - (iv) redundancy devices;
- (i) landing gear, which shall include—
  - (i) landing gear extension and retraction mechanism including the operating sequence of struts, doors, and locking devices, and brake and antiskid systems, if applicable;
  - (ii) steering, including nose or body steering gear;
  - (iii) bogie arrangements;
  - (iv) air or ground sensor relays; and
  - (v) visual downlock indicators;
- (j) ice and rain protection, which shall include—

- (i) rain removal systems;
  - (ii) anti-icing or de-icing systems that affect flight controls, engines; and
  - (iii) pitot static probes, fluid outlets, cockpit windows, and aircraft structures;
- (k) equipment and furnishings, which shall include—
  - (i) exits;
  - (ii) galleys;
  - (iii) water and waste systems;
  - (iv) lavatories;
  - (v) cargo areas;
  - (vi) crew member and passenger seats;
  - (vii) bulkheads;
  - (viii) seating and cargo configurations; and
  - (ix) non-emergency equipment and furnishings;
- (l) navigation equipment, which shall include—
  - (i) flight directors;
  - (ii) horizontal situation indicator;
  - (iii) radio magnetic indicator;
  - (iv) navigation receivers such as global positioning system, automatic direction finder (ADF), very high frequency omnidirectional radio range (VOR), OMEGA, long range navigation (LORAN-C), area navigation (RNAV), marker beacon, distance measuring equipment (DME);
  - (v) inertial systems such as inertia navigation system (INS) and inertia reference (IRS);

- (vi) functional displays;
  - (vii) fault indications and comparator systems;
  - (viii) aircraft transponders;
  - (ix) radio altimeters;
  - (x) weather radar; and
  - (xi) cathode ray tube or computer generated displays of aircraft position and navigation information;
- (m) auto flight system, which shall include—
- (i) autopilot;
  - (ii) auto throttles;
  - (iii) flight director and navigation systems;
  - (iv) automatic approach tracking;
  - (v) auto land; and
  - (vi) automatic fuel and performance management systems;
- (n) flight instruments, which shall include—
- (i) panel arrangement;
  - (ii) flight instruments, including attitude indicator, directional gyro, magnetic compass, airspeed indicator, vertical speed indicator, altimeters, standby instruments; and
  - (iii) instrument power sources, and instrument sensory sources, such as pitot static pressure;
- (o) display systems, which shall include—
- (i) weather radar; and
  - (ii) other cathode ray tube (CRT) displays, such as checklist, vertical navigation or longitudinal navigation displays;

- (p) communication equipment, which shall include—
  - (i) very high frequency (VHF) or high frequency (HF);
  - (ii) audio panels;
  - (iii) in flight interphone and passenger address systems;
  - (iv) voice recorder; and
  - (v) aircraft communication addressing and reporting system (ACARS);
- (q) warning systems, which shall include—
  - (i) aural, visual, and tactile warning systems, including the character and degree of urgency related to each signal; and
  - (ii) warning and caution annunciator systems, including ground proximity and take-off warning systems;
- (r) fire protection, which shall include—
  - (i) fire and overheat sensors, loops, modules, or other means of providing visual or aural indications of fire or overheat detection;
  - (ii) procedures for the use of fire handles, automatic extinguishing systems and extinguishing agents; and
  - (iii) power sources necessary to provide protection for fire and overheat conditions in engines, auxiliary power unit, cargo bay or wheel well, cockpit, cabin and lavatories;
- (s) oxygen, which shall include—
  - (i) passenger, crew, and portable oxygen supply systems;
  - (ii) sources of oxygen such as gaseous or solid;
  - (iii) flow and distribution networks;
  - (iv) automatic deployment systems;



- (v) regulators, pressure levels and gauges; and
  - (vi) servicing requirements.
- 
- (t) lighting, which shall include—
    - (i) cockpit, cabin, and external lighting systems;
    - (ii) power sources;
    - (iii) switch positions; and
    - (iv) spare light bulb locations;
  - (u) lighting, which shall include—
    - (i) cockpit, cabin, and external lighting systems;
    - (ii) power sources;
    - (iii) switch positions; and
    - (iv) spare light bulb locations;
  - (v) lighting, which shall include—
    - (i) cockpit, cabin, and external lighting systems;
    - (ii) power sources;
    - (iii) switch positions; and
    - (iv) spare light bulb locations;
  - (w) emergency equipment, which shall include—
    - (i) fire and oxygen bottles;
    - (ii) first aid kits;
    - (iii) life rafts and life preservers;
    - (iv) crash axes;
    - (v) emergency exits and lights;
    - (vi) slides and slide rafts;

- (vii) escape straps or handles; and
- (viii) hatches, ladders and movable stairs;
- (x) auxiliary power unit, which shall include—
  - (i) electric and bleed air capabilities;
  - (ii) interfaces with electrical and pneumatic systems;
  - (iii) inlet doors and exhaust ducts; and
  - (iv) fuel supply.

(6) An air operator certificate (AOC) holder shall have an initial aircraft ground training curriculum for the flight crew applicable to the type of operations conducted and aircraft flown, which shall include the following aircraft systems integration items—

- (a) use of checklist, which shall include—
  - (i) safety chocks;
  - (ii) cockpit preparation (switch position and checklist flows);
  - (iii) checklist callouts and responses; and
  - (iv) checklist sequence;
- (b) flight planning, which shall include—
  - (i) performance limitations, including meteorological, weight, minimum equipment list and configuration deviation list items;
  - (ii) required fuel loads; and
  - (iii) weather planning, lower than standard take-off minimums or alternate requirements;

- (c) navigation systems, which shall include—
  - (i) pre-flight and operation of applicable receivers;
  - (ii) onboard navigation systems; and
  - (iii) flight plan information input and retrieval;
- (d) auto flight, including; autopilot, auto thrust, and flight director systems, including the appropriate procedures, normal and abnormal indications, and enunciators;
- (e) cockpit familiarisation, which shall include—
  - (i) activation of aircraft system controls and switches to include normal, abnormal and emergency switches; and
  - (ii) control positions and relevant enunciators, lights, or other caution and warning systems.

(7) An air operator certificate (AOC) holder may have separate initial aircraft ground training curricula of varying lengths and subject emphasis which recognise the experience levels of the respective flight crew members and which shall be approved by the Authority.

### **171. Initial aircraft ground training - cabin crew**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a cabin crew member unless that person has completed the initial aircraft ground training for aircraft type, which shall be approved by the Authority.

(2) Initial aircraft ground training for cabin crew members shall include the relevant portions of the operations manuals which relate to aircraft specific configuration, equipment, normal and emergency procedures for the aircraft types in the fleet of the air operator certificate (AOC) holders.

(3) An air operator certificate (AOC) holder shall have an initial aircraft ground training curriculum for cabin crew members which shall be applicable to the type of operations conducted and aircraft flown, including the following general subjects—

- (a) aircraft familiarization which shall include—
  - (i) aircraft characteristics and description;
  - (ii) cockpit configuration;
  - (iii) cabin configuration;
  - (iv) galleys;
  - (v) lavatories; and
  - (vi) stowage areas;
- (b) aircraft equipment and furnishings which shall include—
  - (i) cabin crew member stations;
  - (ii) cabin crew member panels;
  - (iii) passenger seats;
  - (iv) passenger service units and convenience panels;
  - (v) passenger information signs;
  - (vi) aircraft markings; and
  - (vii) aircraft placards;
- (c) aircraft systems which shall include—
  - (i) air conditioning and pressurisation system;
  - (ii) aircraft communication systems (call, interphone and passenger address);
  - (iii) lighting and electrical systems;
  - (iv) oxygen systems (flight crew, observer and passenger); and

- (v) water system;
- (d) aircraft exits which shall include—
  - (i) general information;
  - (ii) exits with slides or slide rafts for pre-flight and normal operation;
  - (iii) exits without slides pre-flight and normal operations; and
  - (iv) window exits;
- (e) crew member communication and coordination which shall include—
  - (i) authority of pilot-in-command;
  - (ii) routine communication signals and procedures; and
  - (iii) crew member briefing;
- (f) routine crew member duties and procedures which shall include—
  - (i) crew member general responsibilities;
  - (ii) reporting duties and procedures for specific aircraft;
  - (iii) pre-departure duties and procedures prior to passenger boarding;
  - (iv) passenger boarding duties and procedures;
  - (v) prior-to-movement-on-the-surface duties and procedures;
  - (vi) prior-to-take-off duties and procedures applicable to specific aircraft;
  - (vii) in-flight duties and procedures;
  - (viii) prior-to-landing duties and procedures;
  - (ix) movement on the surface and arrival duties and procedures;

- (x) after-arrival duties and procedures; and
  - (xi) intermediate stops;
- (g) passenger handling responsibilities which shall include—
- (i) crew member general responsibilities;
  - (ii) infants, children, and unaccompanied minors;
  - (iii) passengers who need special assistance;
  - (iv) passengers who need special accommodation;
  - (v) carry-on stowage requirements;
  - (vi) passenger seating requirements;
  - (vii) smoking and no-smoking requirements; and
  - (viii) approved crew resource management (CRM) training.

(4) An air operator certificate (AOC) holder shall have an initial aircraft ground training curriculum for cabin crew members which shall be applicable to the type of operations conducted and aircraft flown, and which shall include the following aircraft specific emergency subjects—

- (a) emergency equipment which shall include—
- (i) emergency communication and notification systems;
  - (ii) aircraft exits;
  - (iii) exits with slides or slide rafts, emergency operation;
  - (iv) slides and slide rafts in a ditching;
  - (v) exits without slides emergency operation;
  - (vi) window exits emergency operation;
  - (vii) exits with tail cones (emergency operation);
  - (viii) cockpit exits emergency operation;

- (ix) ground evacuation and ditching equipment;
  - (x) first-aid equipment;
  - (xi) portable oxygen systems, oxygen bottles, chemical oxygen generators, protective breathing equipment;
  - (xii) fire-fighting equipment;
  - (xiii) emergency lighting systems; and
  - (xiv) additional emergency equipment;
- (b) emergency assignments and procedures which shall include —
- (i) general types of emergencies specific to aircraft;
  - (ii) emergency communication signals and procedures-
  - (iii) rapid decompression;
  - (iv) insidious decompression and cracked window and pressure seal leaks;
  - (v) fires;
  - (vi) ditching;
  - (vii) ground evacuation;
  - (viii) unwarranted evacuation for example, passenger initiated;
  - (ix) illness or injury;
  - (x) abnormal situations involving passengers or crew members;
  - (xi) unlawful interference;
  - (xii) bomb threat;
  - (xiii) turbulence;
  - (xiv) other unusual situations; and
  - (xv) previous aircraft accidents and incidents; and

- (c) aircraft specific emergency drills which shall include—
- (i) emergency exit drill;
  - (ii) hand fire extinguisher drill;
  - (iii) emergency oxygen system drill;
  - (iv) flotation device drill;
  - (v) ditching drill, if applicable;
  - (vi) life raft removal and inflation drill, if applicable;
  - (vii) slide raft pack transfer drill, if applicable;
  - (viii) slide or slide raft deployment, inflation, and detachment drill, if applicable; and
  - (ix) emergency evacuation slide drill, if applicable.

(5) An air operator certificate (AOC) holder shall ensure that initial aircraft ground training for cabin crew members includes a competence check to determine a person's ability to perform assigned duties and responsibilities.

(6) An air operator certificate (AOC) holder shall ensure that initial ground training for cabin crew members consists of at least the following programmed hours of instruction-

- (a) multi-engine turbine, thirty two hours; and
- (b) multi-engine reciprocating, sixteen hours.

(7) An operator shall ensure that a training programme is completed by a person before that person is assigned as a cabin crew member.

(8) Cabin crew members shall complete a recurrent training programme annually.

(9) A person who undertakes the training programmes shall—



- (a) be competent to execute the safety duties and functions that the cabin crew is assigned to perform in the event of an emergency or in a situation that requires emergency evacuation;
- (b) be drilled and capable of using the emergency and life-saving equipment required to be carried, such as life jackets, life rafts, evacuation slides, emergency exits, portable fire extinguishers, oxygen equipment, first-aid and universal precaution kits, and automated external defibrillators;
- (c) be aware of other crew members' assignments and functions in the event of an emergency so far as is necessary, for the fulfilment of the cabin crew member's own duties;
- (d) be aware of the types of dangerous goods which may, or may not be carried in a passenger cabin; and
- (e) be knowledgeable on the human performance related to passenger cabin safety duties including flight crew-cabin crew coordination.

## **172. Competence checks - cabin crew members**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a cabin crew member unless within the preceding twelve months before that service, that person has passed the competency check for performing the emergency duties appropriate to that person's assignment, which shall be approved by the Authority.

(2) Evaluators shall conduct competency checks for cabin crew members to demonstrate that the cabin crew members' proficiency level is sufficient to successfully perform assigned duties and responsibilities.

(3) A qualified supervisor or inspector approved by the Authority shall observe and evaluate the competency checks for the cabin crew members.

(4) Evaluators shall, for the competency check for each cabin crew member determine the cabin crew member's demonstrated knowledge of—

- (a) the emergency equipment for emergency communication and notification systems including—
  - (i) the aircraft exits;
  - (ii) exits with slides or slide rafts (emergency operation);
  - (iii) slides and slide rafts in a ditching;
  - (iv) exits without slides (emergency operation);
  - (v) window exits (emergency operation) and exits with tail cones (emergency operation);
  - (vi) cockpit exits (emergency operation);
  - (vii) ground evacuation and ditching equipment;
  - (viii) first-aid equipment;
  - (ix) portable oxygen systems (oxygen bottles, chemical oxygen generators, protective breathing equipment (PBE));
  - (x) fire-fighting equipment;
  - (xi) emergency lighting systems; and
  - (xii) additional emergency equipment;
- (b) emergency procedures including—
  - (i) general types of emergencies specific to aircraft;
  - (ii) emergency communication signals and procedures;
  - (iii) rapid decompression;

- (iv) insidious decompression and cracked window and pressure seal leaks;
  - (v) fires;
  - (vi) ditching;
  - (vii) ground evacuation;
  - (viii) unwarranted evacuation, for example that is passenger initiated;
  - (ix) illness or injury;
  - (x) abnormal situations involving passengers or crew members;
  - (xi) turbulence; and
  - (xii) other unusual situations;
- (c) emergency drills including—
- (i) location and use of all emergency and safety equipment carried on the aircraft;
  - (ii) the location and use of all types of exits;
  - (iii) actual donning of a lifejacket where fitted;
  - (iv) actual donning of protective breathing equipment; and
  - (v) actual handling of fire extinguishers;
- (d) crew resource management including -
- (i) decision making skills;
  - (ii) briefings and developing open communication;
  - (iii) inquiry, advocacy, and assertion training; and
  - (iv) workload management;

- (e) dangerous goods including—
  - (i) recognition of and transportation of dangerous goods;
  - (ii) proper packaging, marking, and documentation; and
  - (iii) instructions regarding compatibility, loading, storage and handling characteristics;
  
- (f) security including—
  - (i) unlawful interference; and
  - (ii) disruptive passengers.

(5) An operator shall establish and maintain a cabin crew training programme that is designed to ensure that persons who are trained acquire the competency to enable them perform their assigned duties and that the training programme includes or makes reference to a syllabus for the training programme in the company operations manual.

(6) The training programme should include human factors training.

### **173. Initial aircraft training - flight operations officer**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight operations officer unless that person completes the initial training which shall be approved by the Authority.

(2) Initial aircraft flight operations training for flight operations officers shall include the relevant portions of the operations manual relating to aircraft specific flight preparation procedures, performance, mass and balance, systems and limitations for the aircraft types in the fleet of the air operator certificate (AOC) holder.

(3) An air operator certificate (AOC) holder shall provide initial aircraft training for flight operations officers that includes instruction the following general dispatch subjects—

- (a) normal and emergency communications procedures;
- (b) available sources of weather information;
- (c) actual and prognostic weather charts;
- (d) interpretation of weather information;
- (e) adverse weather phenomena, such as clear air turbulence, wind shear, and thunderstorms;
- (f) Notice to Airmen (NOTAM) system;
- (g) navigational charts and publications;
- (h) air traffic control and instrument flight rules procedures;
- (i) familiarisation with operational area;
- (j) characteristics of special aerodromes and other operationally significant aerodromes which the operator uses, such as terrain, approach aids, or prevailing weather phenomena;
- (k) joint flight operations officer and group responsibilities; and
- (l) approved crew resource management (CRM) training for flight operations officers.

(4) An air operator certificate (AOC) holder shall provide initial aircraft training for flight operations officers that includes instruction the following aircraft characteristics—

- (a) general operating characteristics of the air operator certificate (AOC) holder's aircraft;
- (b) aircraft specific training with emphasis on the following topics—
  - (i) aircraft operating and performance characteristics;
  - (ii) navigation equipment;
  - (iii) instrument approach and communications equipment; and
  - (iv) emergency equipment;

- (c) flight manual training; and
- (d) equipment training.

(5) An air operator certificate (AOC) holder shall provide initial aircraft training for flight operations officers that includes instruction the following emergency procedures—

- (a) assisting the flight crew in an emergency; and
- (b) alerting of appropriate governmental, company and private agencies.

(6) An air operator certificate (AOC) holder shall ensure that initial aircraft ground training for flight operations officers includes a competence check given by an appropriate supervisor or ground instructor and which demonstrates the required knowledge and abilities.

#### **174. Initial aircraft flight training - flight crew member**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight crew member unless that person completes the initial aircraft flight training, for the aircraft type, which shall be approved by the Authority.

(2) Initial aircraft flight training of a flight crew member shall focus on the manoeuvring and safe operation of the aircraft in accordance with the air operator certificate (AOC) holder's normal, abnormal and emergency procedures.

(3) An air operator certificate (AOC) holder may have separate initial flight training curricula for the flight crew members, which recognise the experience levels of the respective flight crew members and which shall be approved by the Authority.

(4) Flight training may be conducted in an appropriate aircraft or adequate synthetic flight trainer with landing capability and which is qualified for training or checking, on circling manoeuvres.

(5) An air operator certificate (AOC) holder shall ensure that pilot initial flight training includes—

- (a) preparation, which shall include—
  - (i) visual inspection, and use authorised of pictorial display for aircraft with a flight engineer;
  - (ii) pre-taxi procedures; and
  - (iii) performance limitations;
- (b) surface operation, which shall include—
  - (i) pushback;
  - (ii) powerback taxi, if applicable to type of operation to be conducted;
  - (iii) starting;
  - (iv) taxi; and
  - (v) pre-take-off checks;
- (c) take-off, which shall include—
  - (i) normal;
  - (ii) crosswind;
  - (iii) rejected;
  - (iv) power failure after  $v_1$ ; and
  - (v) lower than standard minimum, if applicable to type of operation to be conducted;
- (d) climb, which shall include—
  - (i) normal; and
  - (ii) one-engine inoperative during climb to en route altitude;
- (e) en-route, which shall include—

- (i) steep turns;
  - (ii) approaches to stalls (take-off, en route, and landing configurations);in
  - (iii) flight power plant shutdown;
  - (iv) in-flight power plant restart;
  - (v) in-flight power plant restart; and
  - (vi) high speed handling characteristics;
- (f) descent, which shall include—
  - (i) normal; and
  - (ii) maximum rate;
- (g) approaches, which shall include—
  - (i) visual flight rules (VFR) procedures;
  - (ii) visual approach with 50% loss of power on one-engine (2 engines inoperative on 3-engine aircraft for pilot-in-command only);
  - (iii) visual approach with slat or flap malfunction;
  - (iv) instrument flight rules (IFR) precision approaches such as instrument landing system normal and instrument landing system with one-engine inoperative;
  - (v) instrument flight rules (IFR) non-precision approaches non-directional radio beacon
  - (NDB) normal and VHF omni-directional radio range beacon
  - (VOR) normal;
  - (vi) non-precision approach with one engine inoperative (Localizer backcourse procedures, SDF or localizer type directional aid, a global positioning system,



- TACAN and circling approach procedures);
- (vii) missed approach from precision approach;
- (viii) missed approach from non-precision approach; and
- (ix) missed approach with engine failure;
- (h) landings, which shall include—
  - (i) normal with a pitch mis-trim (small aircraft only);
  - (ii) normal from precision instrument approach;
  - (iii) normal from precision instrument approach with most critical engine inoperative;
  - (iv) normal with 50% loss of power on one side (2 engines inoperative on 3-engine aircraft);
  - (v) normal with flap or slat malfunction;
  - (vi) rejected landings;
  - (vii) crosswind;
  - (viii) manual reversion or degraded control augmentation;
  - (ix) short or soft field small aircraft, land amphibian aircraft only; and
  - (x) glassy or rough water, seaplanes only;
- (i) after landing, which shall include—
  - (i) parking;
  - (ii) emergency evacuation; and
  - (iii) docking, mooring, and ramping, for seaplanes;
- (j) other flight procedures during any airborne phase, which shall include—
  - (i) holding;
  - (ii) ice accumulation on airframe;

- (iii) air hazard avoidance; and
- (iv) wind shear or microburst;
- (k) normal, abnormal and alternate systems procedures during any phase, which shall include—
  - (i) pneumatic or pressurisation;
  - (ii) air conditioning;
  - (iii) fuel and oil;
  - (iv) electrical;
  - (v) hydraulic;
  - (vi) flight controls;
  - (vii) anti-icing and de-icing systems;
  - (viii) autopilot;
  - (ix) flight management guidance systems and automatic or other approach and landing aids;
  - (x) stall warning devices, stall avoidance devices, and stability augmentation systems;
  - (xi) airborne weather radar;
  - (xii) flight instrument system malfunction;
  - (xiii) communications equipment; and
  - (xiv) navigation systems;
- (l) emergency systems procedures during any phase, which shall include—
  - (i) aircraft fires;
  - (ii) smoke control;
  - (iii) power plant malfunctions;
  - (iv) fuel jettison;
  - (v) electrical, hydraulic, pneumatic systems;

- (vi) flight control system malfunction; and
- (vii) landing gear and flap system malfunction; and
- (m) procedures for upset prevention and recovery training in a flight simulation training device as contained in the Procedures for Air Navigation Services.

(6) An air operator certificate (AOC) holder shall ensure that flight engineer training includes the following—

- (a) training and practice in procedures related to the carrying out of flight engineer duties and functions, where this training and practice may be accomplished either in flight or, in a synthetic flight trainer;
- (b) training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, human performance including threat and error management and in the transport of dangerous goods; and
- (c) a proficiency check as specified in regulation 155.

### **175. Initial specialized operations training**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight crew member unless that person completes the appropriate initial specialised operations training curriculum which shall be approved by the Authority.

(2) The specialised operations for which initial training curricula shall be developed include—

- (a) low minima operations, including low visibility take-offs and Category II and Category III operations;
- (b) extended range operations;
- (c) specialised navigation; and
- (d) pilot-in-command right seat qualification.

(3) An air operator certificate (AOC) holder shall provide initial specialised operations training to ensure that each pilot and flight operations officer is qualified in the type of operation in which that person serves and in any specialised or new equipment, procedures, and techniques, such as—

- (a) class II navigation including—
  - (i) knowledge of specialised navigation procedures, such as required navigation performance (RNP), minimum navigation performance system (MNPS) and reduced vertical separation minimum (RVSM); and
  - (ii) knowledge of specialised equipment, such as inertia navigation system (INS), long range navigation (LORAN), OMEGA;
- (b) Category II and Category III operations approaches including—
  - (i) special equipment, procedures and practice;
  - (ii) a demonstration of competency;
- (c) lower than standard minimum take-offs including—
  - (i) runway and lighting requirements;
  - (ii) rejected take-offs at or near V1 with a failure of the most critical engine;
  - (iii) taxi operations; and
  - (iv) procedures to prevent runway incursions under low visibility conditions;
- (d) extended range operations with two turbine engine aeroplanes;
- (e) airborne radar approaches; and
- (f) autopilot instead of co-pilot.

## **176. Aircraft differences training**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a crew member on an aircraft of a type for which a different curriculum is included in the air operator certificate (AOC) holder's approved training programme, unless that person satisfactorily completes that curriculum, with respect to both the crew member position and the particular variant of that aircraft.

(2) An operator shall ensure that a crew member completes—

(a) differences training which requires additional knowledge and training on an appropriate training device or the aircraft—

(i) when operating another variant of an aircraft of the same type or another type of the same class currently operated; or

(ii) when changing equipment procedures on types or variants currently operated;

(b) familiarisation training which requires the acquisition of additional knowledge—

(i) when operating another aircraft of the same type; or

(ii) when changing equipment procedures on types of variants currently operated.

(3) An operator shall specify in the operations manual when the differences training or familiarization training is required.

(3) An air operator certificate (AOC) holder shall provide aircraft differences training for flight operations officers when the operator has aircraft variances within the same type of aircraft, and the training shall include—

(a) operations procedures including—

- (i) operations under adverse weather phenomena conditions, including clear air turbulence, wind shear, and thunderstorms;
  - (ii) mass and balance computations and load control procedures;
  - (iii) aircraft performance computations, to include take-off mass limitations based on departure runway, arrival runway, and en –route limitations, and also engine-out limitations;
  - (iv) flight planning procedures, to include route selection, flight time, and fuel requirements analysis;
  - (v) dispatch release preparation;
  - (vi) crew briefings;
  - (vii) flight monitoring procedures;
  - (viii) flight crew response to various emergency situations, including the assistance the aircraft flight operations officer can provide in each situation;
  - (ix) minimum equipment list and configuration deviation list procedures;
  - (x) manual performance of required procedures in case of the loss of automated capabilities;
  - (xi) training in appropriate geographic areas;
  - (xii) air traffic control and instrument flight rules procedures, to include  
ground hold and central flow control procedures; and
  - (xiii) radiotelephony procedures; and
- (b) emergency procedures including—
- (i) actions taken to aid the flight crew; and
  - (ii) air operator certificate (AOC) holder’s notification and the Authority notification.

## **177. Use of synthetic flight trainers**

A synthetic flight trainer that is used for flight crew member qualification shall—

- (a) be specifically approved by the Authority for the air operator certificate holder, the type of aircraft, including the type variations for which the training or check is being conducted and particular manoeuvre, procedure, or flight crew member function involved;
- (b) maintain the performance, functional, and other characteristics that are required for approval;
- (c) be modified to conform with any modification to the aircraft being simulated that results in changes to performance, functional, or other characteristics required for approval;
- (d) be given a daily functional pre-flight check before use;
- (e) have a daily discrepancy logbook kept by the appropriate instructor or check pilot at the end of each training or check flight; and
- (f) for initial aircraft type training, be qualified for training and checking on the circling manoeuvre.

## **178. Aircraft and instrument proficiency checks**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight crew member unless since the beginning of the sixth month before service, that person passed the proficiency check, prescribed by the Authority, in the make and model of aircraft on which the services of that person are required.

(2) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight crew member in instrument flight rules operations unless from the beginning of the sixth month before that service, that person passed the instrument competency check prescribed by the Authority.

(3) A flight crew member may complete the requirements of subregulations (1) and (2) of this regulation simultaneously in a make and model of the aircraft on which the services of that person are required.

(4) The completion of a training programme for a particular aircraft type and the satisfactory completion of a pilot in command (PIC) proficiency check, shall satisfy the requirement for an aircraft type rating practical test provided that the proficiency check includes all manoeuvres and procedures required for a type rating practical test and is conducted by an examiner.

(5) Aircraft and instrument proficiency checks for pilot in command (PIC) and co-pilot shall include the operations and procedures specified in Table 3.



TABLE 3 — INSTRUMENT PROFICIENCY CHECK

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

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

(6) Examiners or check pilots may waive certain requirements of the proficiency check, based on an assessment of the pilot's demonstrated level of performance.

(7) The oral and flight phases of a proficiency check shall not be conducted simultaneously.

(8) When the examiner or check pilot determines that a pilot's performance is unsatisfactory, the examiner or check pilot may terminate the examination flight.

(9) If the proficiency check is to be terminated for mechanical or other reasons, and there are events which still need to be repeated, the examiner or check pilot shall issue a letter of discontinuance, which shall be valid for sixty days and which shall list the specific areas of operation that have been successfully completed.

(10) At least one of the two annual proficiency checks shall be conducted by an examiner and the other proficiency check may be conducted by a check pilot or the Authority.

### **179. Introduction of new equipment or procedures**

A person shall not serve as, and an air operator certificate (AOC) holder shall not use any person as, a flight crew unless that person attend the air operator certificate (AOC) holder's approved training programme for both the crew member position and the particular variant of that aircraft.

### **180. Flight engineer proficiency checks**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight engineer on an aircraft unless within the preceding twelve calendar months the person has had a proficiency conducted check in accordance with the requirements prescribed by these Regulations or 50 hours flight time for the air operator certificate (AOC) holder, as flight engineer in the type aircraft

(2) Examiners shall for proficiency checks for flight engineers include oral or written examinations of the following normal, abnormal, and emergency procedures—

- (a) normal procedures which shall include—
  - (i) interior pre-flight;
  - (ii) panel set-up;
  - (iii) fuel load;
  - (iv) engine start procedures;
  - (v) taxi and before take-off procedures;
  - (vi) take-off and climb pressurization;
  - (vii) cruise and fuel management;
  - (viii) descent and approach;
  - (ix) after landing and securing;
  - (x) crew coordination;
  - (xi) situational awareness;
  - (xii) performance computations; and
  - (xiii) anti-ice and de-ice measures; and
- (b) abnormal and emergency procedures which shall include —
  - (i) troubleshooting;
  - (ii) knowledge of checklist;
  - (iii) crew coordination;
  - (iv) minimum equipment list (MEL);
  - (v) configuration deviation list (CDL); and
  - (vi) emergency or alternate operation of aircraft flight systems.

## **181. Competence checks - flight operations officer.**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight operations officer unless within the preceding twelve months before that service, the person passed the competency check, approved by the Authority, performing the flight preparation and subsequent duties appropriate to that person's assignment.

(2) For the purpose of subregulation (1), the evaluators of a flight operations officer shall conduct a competency check for the flight operations officer to demonstrate that that person's proficiency level is sufficient to ensure the successful outcome of all dispatch operations.

(3) An authorized person shall observe and evaluate the competency check for flight operations officers.

(4) Each competency check for flight operations officers shall include—

- (a) an evaluation of all aspects of the dispatch function;
- (b) a demonstration of the knowledge and abilities in normal and abnormal situations; and
- (c) an observation of actual flights being dispatched.

(5) An evaluator of a newly hired flight operations officer shall during the initial competency checks, include an evaluation of all of geographic areas and types of aircraft the flight operations officer shall be qualified to dispatch.

(6) The authorized person may approve a competency check of representative aircraft types when, in his or her judgement, a check including all types of aircraft is impractical or unnecessary.

(7) Evaluators may limit the initial equipment and transition competency checks solely to the dispatch of the types of aircraft on which the flight operations officer is qualifying, unless the check is to simultaneously count as a recurrent check.

(8) An evaluator of flight operations officers shall include, during recurrent and re-qualification competency checks, a representative sample of aircraft and routes for which the flight operations officers maintains current qualification.

(9) A flight operations officer shall not qualify in extended diversion time operations (EDTO) or other special operations which are authorised by the Authority, unless that flight operations officer submits special operations competency checks to the Authority

## **182. Supervised line flying pilots**

(1) A pilot who initially qualifies as a pilot in command (PIC) shall complete a minimum of ten flights while performing the duties of a pilot in command (PIC) under the supervision of a check pilot.

(2) A pilot in command (PIC) who is transitioning to a new aircraft type shall complete a minimum of five flights while performing the duties of a pilot in command (PIC) under the supervision of a check pilot.

(3) A pilot who qualifies for duties other than as a pilot in command (PIC) shall complete a minimum of five flights performing those duties under the supervision of a check pilot.

(4) During the time when a qualifying pilot in command (PIC) is acquiring operating experience, an authorised instructor who is also serving as the pilot in command (PIC) shall occupy a co-pilot station.

(5) In the case of a transitioning pilot in command (PIC), the check pilot serving as pilot in command (PIC) may occupy the observer's seat if the transitioning pilot has made at least two take-offs and landings in the type of aircraft used, and has satisfactorily demonstrated to the authorized instructor that he is qualified to perform the duties of a pilot in command (PIC) for that type of aircraft.

### **183. Supervised line flying flight engineers.**

A flight engineer who qualified on a new type rating on an aircraft shall perform the functions of a flight engineer for a minimum of five flights under the supervision of a flight instructor or qualified flight engineer approved by the air operator certificate holder and accepted by the Authority.

### **184. Supervised line experience - cabin crew.**

A person who trains as a cabin crew member shall—

- (a) perform the functions of a cabin crew member for a minimum of two flights under the supervision of a cabin crew instructor; and
- (b) not serve as a crew member.

### **185. Line observations - flight operations officer.**

A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight operations officer unless within the preceding twelve months before that service, that person observed, in the cockpit, the conduct of two complete flights over routes which are representative of those for which that person is assigned duties.

### **186. Route and area checks - pilot qualification**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a pilot unless within the preceding twelve months, that person passed a route check in which the person satisfactorily performed his or her assigned duties in one of the types of aircraft he or she is to fly.

(2) A person shall not perform pilot in command (PIC) duties over a designated special operational area that requires a special navigation system or procedures or in extended diversion time operations (EDTO) operations unless his or her competency with the system and procedures has been demonstrated to the air operator certificate (AOC) holder within the past twelve months.

(3) A pilot in command (PIC) of an aircraft shall demonstrate special operational competency by navigation over the route or area as pilot in command (PIC) under the supervision of a check pilot on an annual basis and shall demonstrate a knowledge of—

- (a) the terrain and minimum safe altitudes;
- (b) the seasonal meteorological conditions;
- (c) the search and rescue procedures;
- (d) the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place;
- (e) the procedures applicable to flight paths over heavily populated areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, and the applicable operating minima; and
- (f) the meteorological, communication and air traffic facilities, services and procedures.

### **187. Low minimums authorisation - pilot in command (PIC)**

(1) Where a pilot in command (PIC) has not completed fifteen flights performing pilot in command (PIC) duties in an aircraft type, including five approaches to landing using Category I or II operations procedures, that pilot in command (PIC) shall not plan for or initiate an instrument approach when the ceiling is less than 300 feet and the visibility is less than 2000m.

(2) Where a pilot in command (PIC) has not completed twenty flights performing pilot in command (PIC) duties in an aircraft including five approaches and landing using Category III operations procedures, that pilot in command (PIC) shall not plan for or initiate an approach when the ceiling is less than 100 feet or the visibility is less than 400 m runway visual range (RVR).



## **188. Designated special aerodromes and heliports - pilot in command (PIC) qualification**

(1) The Authority may determine that certain aerodromes, due to items such as the surrounding terrain obstructions, or complex approach or departure procedures qualify as special airports and that certain areas or routes, or both areas and routes require a special type of navigation qualification.

(2) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, pilot in command (PIC) for operations at special airport qualifications aerodromes unless within the preceding twelve months the pilot in command (PIC)—

- (a) is qualified by the air operator certificate (AOC) holder through a pictorial means acceptable to the Authority for that aerodrome; or
- (b) the assigned co-pilot made a take-off and landing at that aerodrome or while serving as a flight crew member for the air operator certificate (AOC) holder.

## **189. Designated special aerodrome qualification limitations**

(1) The designated special aerodrome qualification limitations in regulation 188(1) are not applicable if an operation occurs—

- (a) during daylight hours;
- (b) as when the visibility is at least 5 km; and
- (c) when the ceiling at that aerodrome is at least 1,000 feet above the lowest initial approach altitude prescribed for an instrument approach procedure.

## **190. Recurrent training and recurrent checking - flight crew members**

(1) An operator shall ensure that—

- (a) a flight crew member undergoes the recurrent training specified in subregulation (2) and recurrent checking in subregulation (3) and that all the training and checking is relevant to the type of aircraft or variant of aircraft on which the flight crew member operates; and
- (b) a recurrent training and checking programme is established in the operations manual and is approved by the Authority.

(2) The following recurrent training shall be conducted by the specified personnel—

- (a) ground and refresher training, by suitably qualified personnel;
- (b) aeroplane synthetic flight trainer training, by an authorized instructor or in the case of the synthetic flight trainer content schedule, a synthetic flight trainer authorized instructor provided that the authorized instructor or synthetic flight trainer authorized instructor satisfied the requirements of the operator with respect to experience and knowledge and that this is sufficient to instruct on the items specified in the operations manual;
- (c) emergency and safety equipment training, by suitably qualified personnel;
- (d) crew resource management training, by suitably qualified personnel to integrate elements of crew resource management into all phases of recurrent training; and
- (e) modular crew resource management training, by at least one crew resource management (CRM) trainer acceptable to the Authority and who may be assisted by experts for specific areas.

(3) The following recurrent checking shall be conducted by the specified personnel—

- (a) operator proficiency check, by a check pilot or flight engineer authorized by the air operator certificate (AOC) holder and accepted by the Authority, as appropriate, or, if the check is conducted in a synthetic flight trainer training device, by a check pilot or authorized flight engineer as may be appropriate; or
- (b) line checks, by a check pilot of the operator and acceptable to the Authority; and
- (c) emergency and safety equipment checking by suitably qualified personnel acceptable to the Authority.

(4) The period of the validity of an operator proficiency check—

- (a) shall be six months in addition to the remainder of the month of issue; or
- (b) if issued within the final three months of the validity of the last operator proficiency check, shall be extended from the date of issue for six months from the expiry date of that last operator proficiency check.

(5) An operator shall ensure that each flight crew member undergoes a line check on the aircraft to demonstrate his or her competence in carrying out the normal line operations described in the operations manual.

(6) The period of validity of a line check referred to in subregulation (5)—

- (a) shall be twelve months, in addition to the remainder of the month of issue; or
- (b) if issued within the final three months of validity of the last line check, shall be extended from the date of issue for twelve months from the expiry date of that last check.

(7) An operator shall ensure that each flight crew member undergoes training and checking on the location and for the use of emergency and safety equipment carried on an aeroplane.

(8) The period of validity of an emergency and safety equipment check referred to in subregulation (7)—

- (a) shall be twelve months in addition to the remainder of the month of issue; or
- (b) if issued within the final three months of validity of the last emergency and safety check, shall be extended from the date of issue for twelve months from the expiry date of the last emergency and safety equipment check.

(9) An operator shall ensure that—

- (a) elements of crew resource management (CRM) are integrated into all appropriate phases of the recurrent training; and
- (b) a flight crew member undergoes specific modular crew resource management (CRM) training and that all major topics of crew resource management (CRM) training are covered over a period not exceeding three years.

(10) An operator shall ensure that each flight crew member undergoes—

- (a) ground and refresher training at least every twelve months, and where the training is conducted within three months to the expiry of the twelve months period, the next ground and refresher training shall be completed within twelve months from the original expiry date of the last ground and refresher training; and
- (b) aircraft training or synthetic flight trainer training at least every six months, and where the training is conducted within three months to the expiry of the twelve months

period, the next aircraft or synthetic flight trainer training shall be completed within six months from the original expiry date of the last aircraft or synthetic flight trainer training.

**191. Recurrent training- cabin crew members**

(1) An operator shall ensure that—

- (a) a cabin crew member undergoes recurrent training, covering the actions assigned to the cabin crew member in normal and emergency procedures and that the drills are relevant to the type or variant of aircraft on which the cabin crew member operates as specified in this regulation; and
- (b) the recurrent training and checking programme, which shall be approved by the Authority, includes theoretical and practical instruction together with individual practice as provided in this regulation.

(2) The period of validity of recurrent training and the associated checking required by this regulation shall be twelve months in addition to the remainder of three months of issue.

(3) If issued within the last three months of validity of the last check, the period of validity shall extend from the date of issue for twelve months, from the expiry date of that last check.

(4) An operator shall ensure that—

- (a) the recurrent training required under this regulation is conducted by suitably qualified persons;
- (b) every twelve months practical training is conducted and that the programme of practical training includes—
  - (i) emergency procedures including pilot incapacitation;
  - (ii) evacuation procedures including crowd control techniques;

- (iii) touch-drills by each cabin crew member for opening normal and emergency exits for passenger evacuation;
  - (iv) the location and handling of emergency equipment, including oxygen systems, and the donning by each cabin crew member of lifejackets, portable oxygen and protective breathing equipment;
  - (v) first aid and the contents of the first aid kit;
  - (vi) stowage of articles in the cabin;
  - (vii) security procedures;
  - (viii) incident and accident review; and
  - (ix) crew resource management;
- (c) recurrent training for cabin crew member is conducted at intervals not exceeding three years, and that the recurrent training for cabin crew members includes—
- (i) the operation and actual opening of all normal and emergency exits for passenger evacuation in an aeroplane or representative training device;
  - (ii) demonstration of the operation of all other exits including cock pit windows;
  - (iii) training of cabin crew member undergoing realistic and practical training in the use of all fire-fighting equipment, including protective clothing, representative of that carried in the aeroplane;
  - (iv) use of pyrotechnics, actual or representative devices; and
  - (v) demonstration of the use of the life-raft, or slide-raft, where fitted.

(5) For the purposes of the training required under subregulation (4) (c) (iii), each cabin crew member shall—

- (a) extinguish a fire characteristic of an aeroplane interior fire except that, in the case of Halon extinguishers, an alternative extinguishing agent may be used; and
- (b) don and use protective breathing equipment in an enclosed, simulated smoke-filled environment.

(6) The requirements in this regulation shall be included in the training of cabin crew members, as may be appropriate.

## **192. Recurrent training- flight operations officers**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a flight operations officer unless within the preceding twelve months that person completes the recurrent ground curricula which shall be approved by the Authority.

(2) An air operator certificate (AOC) holder—

- (a) shall establish and maintain a recurrent training programme, to be undertaken annually by each flight operations officer, which shall be approved by the Authority and established in the air operator certificate (AOC) holder's operations manual;
- (b) shall conduct all recurrent training, of flight operations officers, by suitably qualified personnel;
- (c) shall ensure that, every twelve months, each flight operations officer receive recurrent training in at least the following—
  - (i) aircraft-specific flight preparation;
  - (ii) emergency assistance to flight crew members;
  - (iii) crew resource management; and
  - (iv) recognition and transportation of dangerous goods; and

- (d) may administer the recurrent ground and flight training curricula concurrently or intermixed, but shall record completion of each of these curricula separately.

(3) A flight operations officer shall undergo recurrent training relevant to the type or variant of aircraft and operations conducted by the air operator certificate (AOC) holder.

### **193. Check pilot training**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a check pilot in an aircraft or as a check pilot in a synthetic flight trainer in a training programme unless with respect to the aircraft type involved, that person has satisfactorily completed the appropriate training phases including recurrent training, that are required to serve as pilot-in-command (PIC) for the aircraft.

(2) An air operator certificate (AOC) holder shall ensure that initial ground training for check pilots includes-

- (a) check pilot duties, functions, and responsibilities;
- (b) the applicable regulations and the air operator certificate (AOC) holder's policies and procedures;
- (c) the appropriate methods, procedures, and techniques for conducting the required checks;
- (d) proper evaluation of the performance of the person undergoing training, including detection of improper and insufficient training and the personal characteristics of that person that may adversely affect safety;
- (e) the appropriate corrective action to be taken in the case of unsatisfactory checks; and
- (f) the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aircraft.



(3) The training shall include transition ground training for all check pilots which shall contain the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures applicable to the aircraft for which the check pilot is in transition.

(4) An air operator certificate (AOC) holder shall ensure that the initial and transition flight training for check pilots includes—

- (a) training and practice in conducting flight evaluations, from the left and right pilot seats for pilot check pilots in the required normal, abnormal, and emergency procedures to ensure competence to conduct the flight checks;
- (b) the potential results of improper, untimely, or non-execution of safety measures during an evaluation;
- (c) the safety measures, to be taken from either pilot seat for pilot check pilots, for emergency situations that are likely to develop during an evaluation;
- (d) training and practice in conducting flight checks in the required normal, abnormal, and emergency procedures to ensure competence to conduct the evaluations checks required by this regulation; and
- (e) training in the operation of synthetic flight trainers to ensure competence to conduct the evaluations required by this regulation.

(5) An air operator certificate (AOC) holder shall accomplish flight training for check pilot in full or in part, in an aircraft, in flight in a synthetic flight trainer, as appropriate.

#### **194. Authorised instructor or synthetic flight trainer and authorized instructor training**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, an authorised instructor or a synthetic flight trainer authorised instructor in a training programme unless—

- (a) that person satisfactorily completed initial or transition authorized instructor or training synthetic flight trainer authorised instructor training, as may be appropriate; and
- (b) within the preceding twenty four months, that person satisfactorily conducts instruction under the observation of an authorized person, an air operator certificate (AOC) holder's check pilot, an authorised flight engineer, as may be appropriate, or an examiner employed by the air operator certificate (AOC) holder.

(2) An air operator certificate (AOC) holder shall—

- (a) accomplish the observation check for an authorized instructor or a synthetic flight trainer authorised instructor, in part or in full, in an aircraft, or a synthetic flight trainer; as appropriate;
- (b) ensure that the initial ground training for an authorised instructor and synthetic flight trainer authorised instructor includes—
  - (i) the duties, functions, and responsibilities of authorised instructors and synthetic flight trainer authorised instructors;
  - (ii) the applicable regulations and the air operator certificate (AOC) holder's policies and procedures;
  - (iii) the appropriate methods, procedures, and techniques for conducting the required checks;
  - (iv) the proper evaluation of trainee performance including the detection of improper and insufficient training and personal characteristics of an applicant that may adversely affect safety;

- (v) the appropriate corrective action in the case of unsatisfactory checks;
  - (vi) the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aircraft; and
  - (vii) except for a holder of a flight instructor licence, the fundamental principles of the teaching-learning process, the teaching methods and procedures, and the instructor-trainee relationship;
- (c) ensure that the transition ground training for an authorised instructor and a synthetic flight trainer authorised instructor includes the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures applicable to the aircraft to which the authorised instructor is in transition;
- (d) ensure that the initial and transition flight training for an authorized instructor and a synthetic flight trainer authorised instructor include—
- (i) the safety measures for emergency situations that are likely to develop during instruction;
  - (ii) the potential results of improper, untimely, or non-execution of safety measures during instruction;
  - (iii) for pilot authorised instructor—
    - (aa) in-flight training and practice in conducting flight instruction from the left and right pilot seats in the required normal, abnormal, and emergency procedures, to ensure competence as an instructor; and
    - (bb) the safety measures to be taken from either pilot seat for emergency situations that are likely to develop during instruction; and

- (iv) for authorised flight engineer instructor, in-flight training to ensure competence to perform assigned duties;
- (e) accomplish the flight training requirements for an authorised instructor in full or in part in an aircraft, in flight or in a synthetic flight trainer;
- (f) ensure that the initial and transition flight training for synthetic flight trainer authorised instructor include—
  - (i) training and practice in the required normal, abnormal, and emergency procedures to ensure competence to conduct the flight instruction required by this regulation, where the training and practice are accomplished in full or in part in a synthetic flight trainer; and
  - (ii) training in the operation of synthetic flight trainers, to ensure competence to conduct the flight instruction required by this regulation.

### **195. Authorised instructor qualifications**

A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, an instructor in an established training programme unless, with respect to the aircraft type involved, that person—

- (a) holds licences and ratings required to serve as a pilot in command (PIC) or a flight engineer;
- (b) satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command (PIC) or a flight engineer, as may be applicable;
- (c) satisfactorily completed the appropriate proficiency, competency and recency of experience checks that are

required to serve as a pilot in command (PIC) or a flight engineer, as may be applicable;

- (d) satisfactorily completed the applicable initial or transitional training requirements and the Authority observed the flight competency check of that person; and
- (e) holds a class 1 medical certificate.

### **196. Check pilot and authorised flight engineer qualifications**

A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a check pilot or flight engineer, in an established training programme unless, with respect to the aircraft type involved, that person—

- (a) holds the pilot licences and ratings required to serve as pilot in command (PIC) or a flight engineer;
- (b) satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command (PIC) or a flight engineer;
- (c) satisfactorily completed the appropriate proficiency, competency and recurrence of experience checks that are required to serve as a pilot in command (PIC) or a flight engineer;
- (d) satisfactorily completed the applicable initial or transitional training requirements and the Authority observed the in-flight competency check;
- (e) holds class I or class II medical certificate, as may be applicable; and
- (f) has been approved by the Authority to perform the duties of a check pilot or flight engineer, as may be applicable.

## **197. Check pilot designation, authorizations and limitations**

(1) A person shall not serve as, and an air operator certificate (AOC) holder shall not use a person as, a check pilot for—

- (a) any flight check unless that person has been designated by name, for the specified function, by the Authority within the preceding twelve months;
- (b) any check—
  - (i) in an aircraft as a required flight crew member unless that person holds the required flight crew licence and ratings and has completed all the applicable training provided by the air operator certificate (AOC) holder, the qualification and currency requirements under these Regulations, which are applicable to the crew position and the flight operations being checked;
  - (ii) in an aircraft as an observer check pilot, unless that person holds the required pilot licences and ratings and has completed all the applicable training, has the qualification and the line observations required under these Regulations, which are applicable to the position and the flight operations being checked; or
  - (iii) in a synthetic flight trainer, unless that person completed or observed with the air operator certificate (AOC) holder, all the training, qualification and line observation required under these Regulations which are applicable to the position and flight operations being checked.

(2) For purposes of subregulation (1), a check pilot shall be authorized to—

- (a) conduct proficiency or competency checks, line checks, and special qualification checks;
- (b) supervise the re-establishment of landing recurrence; and

- (c) supervise any initial operating experience requirements prescribed by these Regulations.

### **198. Synthetic flight trainer approval**

An air operator certificate (AOC) holder shall not use a synthetic flight trainer for training or checking unless that synthetic flight trainer has been specifically approved for the air operator certificate (AOC) holder, in writing, by the Authority and the trainer shall not be used for any purpose other than the purpose approved by the Authority.

### **199. Line qualification - check pilot and instructor**

A person shall not serve as, and an air operator certificate holder shall not use a person as, a check pilot or synthetic flight trainer instructor unless, within the preceding twelve months before that service, that person has—

- (a) flown at least five flights as a required flight crew member for the type of aircraft to which the person is assigned; or
- (b) observed, in the cockpit, the conduct of the pilots during two complete flights, in the aircraft type to which the person is assigned.

### **200. Termination of a proficiency, competence or line check**

An air operator certificate holder shall not use a crew member or flight operations officer whose check was terminated in commercial air transport operations, until the completion of a satisfactory recheck of the crew member or flight operations officer is carried out.

### **201. Recording of crew member qualifications**

(1) The air operator certificate holder shall record and maintain for each crew member and flight operations officer, a record of each test and check as required by these Regulations.

(2) A pilot may complete the curricula required by these Regulations concurrently or intermixed with other required curricula, but the completion of each of these curricula shall be recorded separately.

## **202. Monitoring of training and checking activities**

(1) An air operator certificate (AOC) holder shall forward to the Authority, at least five working days prior to a scheduled activity, information on the dates, location, and the reporting times of—

- (a) the training to be conducted in accordance with the curriculum in the air operator certificate (AOC) holder's approved training programme; and
- (b) the proficiency, competence and line checks that are to enable adequate supervision of the training and checking activities.

(2) Failure to provide the information required under subregulation (1) may invalidate the training or check and the Authority may require that it be repeated for observation purposes.

## **203. Eligibility period**

(1) A crew member who is required to take a proficiency check, a test or a competency check, or recurrent training to maintain qualification for commercial air transport operations shall complete those requirements at any time during the eligibility period.

(2) The eligibility period is a three month period and comprises, the month prior, the month due, and the month after any due date specified by this regulation.

(3) For calculation of the due date, completion of a requirement at any time during the eligibility period shall be considered as completion in the month due.

## **PART VIII – FLIGHT OPERATIONS OFFICERS AND FLIGHT DISPATCHERS**

### **204. Flight operations officers and flight dispatchers - persons qualified in flight release**

(1) A flight operations officer or a flight dispatcher shall be employed as required by the approved method of control and



supervision of flight operations of the operator, and shall be licensed in accordance with the **Civil Aviation (Personnel Licensing) Regulations 2020**.

(2) In confirming the qualifications of a flight operations officer or a flight dispatcher other than the flight operations officer or a flight dispatcher licenses, the Authority shall in accordance with the approved method of control and supervision of flight operations, require that the qualifications, as a minimum, meet the requirements of the Civil Aviation Authority (Personnel Licensing) Regulations, 2020, for flight operations officers and flight dispatchers licenses.

(3) A flight operations officer or flight dispatcher shall not be assigned duty unless that person—

- (a) satisfactorily completes the operator-specific training course that addresses all the specific components of the approved method of control and supervision of flight operations as specified in regulation 10;
- (b) within the preceding 12 months made, at least two qualification flights in the flight crew compartment of an aeroplane over any area for which that individual is authorized to exercise flight supervision and the flights shall include landings at as many aerodromes as may be practicable;
- (c) demonstrates to the operator knowledge of—
  - (i) the contents of the operations manual;
  - (ii) the radio equipment of the aeroplanes of the operator; and
  - (iii) the navigation equipment of the aeroplanes of the operator;
- (d) for the operations for which the officer is responsible and areas in which that individual is authorized to exercise flight supervision, demonstrates to the operator knowledge of—

- (i) the seasonal meteorological conditions and the sources of meteorological information;
  - (ii) the effects of meteorological conditions on radio reception of the aeroplanes of the operator;
  - (iii) the peculiarities and limitations of each navigation system which is used by the operation; and
  - (iv) the aeroplane loading instructions;
- (e) demonstrates to the operator knowledge and skills related to human performance relevant to dispatch duties; and
  - (f) demonstrates to the operator the ability to perform the duties specified in regulation 110 of these regulations.

(4) A flight operations officer or flight dispatcher assigned to duty shall maintain a complete familiarization with all features of the operation which are pertinent to such duties, including knowledge and skills related to human performance.

(5) A flight operations officer or flight dispatcher shall not be assigned to duty after 12 consecutive months of absence from such duty, unless the provisions of this regulation are met.

## **205. Company procedures indoctrination**

(1) A person shall not serve as and an air operator certificate (AOC) holder shall not use a person as, a crew member or flight operations officer unless that person is trained in the company procedures using a curriculum approved by the Authority and which includes a complete review of the operations manual procedures which are pertinent to the duties of the crew member or flight operation officer.

(2) An air operator certificate (AOC) holder shall ensure that all operations personnel are trained and indoctrinated in company procedures, which shall covers—

- (a) the air operator certificate (AOC) holder's organisation, scope of operation, and administrative practices which are applicable to crew member assignments and duties;
- (b) the appropriate provisions of civil aviation regulations and other applicable regulations and guidance materials;
- (c) the air operator certificate (AOC) holder policies and procedures;
- (d) the applicable crew member manuals; and
- (e) appropriate portions of the air operator certificate (AOC) holder's operations manual.

(3) An air operator certificate (AOC) holder shall provide a minimum of forty programmed hours for indoctrination in company procedures unless the Authority approves a reduction in the hours of instruction.

## PART IX—MANUALS, LOGS AND RECORDS

### **206. Flight manual**

(1) An operator shall ensure that a flight manual contains the information specified in the **Civil Aviation (Airworthiness) Regulations 2020**.

(2) The flight manual shall be updated by implementing the changes that are declared mandatory by the Authority.

### **207. Operator's maintenance control manual**

(1) The operator's maintenance control manual provided in accordance with regulation 124, which may be issued in separate parts, shall contain—

- (a) a description of the procedures required by these regulations including, where applicable-

- (i) a description of the administrative arrangements between the operator and the approved maintenance organisation; and
  - (ii) a description of the maintenance procedures and the procedures for completing and signing a maintenance release where maintenance is based on a system other than that of an approved maintenance organisation;
- (b) the names and duties of the qualified person or persons required by regulation 124 of these regulations;
- (c) a reference to the maintenance programme required by regulation 125 of these regulations;
- (d) a description of the methods used for the completion and retention of the operator's maintenance records required by regulation 126;
- (e) a description of the methods used for the completion and retention of the operator's continuing airworthiness and maintenance records required by regulation 126;
- (f) a description of the procedures for monitoring, assessing and reporting maintenance and operational experience required by regulation 127;
- (g) a description of the procedures for complying with the service information reporting requirements of the regulations governing airworthiness regulations;
- (h) a description of procedures for assessing continuing airworthiness information and implementing any resulting actions, as required by regulation 127;
- (i) a description of the procedures for implementing action resulting from mandatory continuing airworthiness information;

- (j) a description of establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme in order to correct any deficiency in that programme;
- (k) a description of the aircraft types and models to which the manual applies;
- (l) a description of the procedures for ensuring that unserviceability's affecting airworthiness are recorded and rectified; and
- (m) a description of the procedures for advising the Authority of significant in-service occurrences.

## **208. Maintenance programme**

(1) An operator shall ensure that maintenance programme for each aeroplane required by regulation 125 contains—

- (a) the maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aeroplane;
- (b) when applicable, a continuing structural integrity programme;
- (c) the procedures for changing or deviating from paragraph (a) or (b); and
- (d) when applicable, the condition monitoring and reliability programme descriptions for aircraft systems, components and engines.

(2) Maintenance tasks and intervals that have been specified as mandatory in the approval of the type design shall be identified as such by an operator.

(3) The maintenance programme shall be based on maintenance programme information made available by the State of Design or by

the organisation responsible for the type design, and any additional applicable experience.

(4) Electronic Aircraft Maintenance Records (EAMR) may be used in accordance with the **Civil Aviation (Approved Maintenance Organization) Regulations 2020** that address the existence and use of EAMR digital and other paperless forms of maintenance records.

## **209. Journey log book**

(1) An aeroplane journey log book shall contain the following items and for each item, the corresponding roman numerals—

- (a) the aeroplane nationality and registration;
- (b) the date;
- (c) the names of crew members;
- (d) the duty assignments of crew members;
- (e) the place of departure;
- (f) the place of arrival;
- (g) the time of departure;
- (h) the time of arrival;
- (i) the hours of flight;
- (j) the nature of flight (private, aerial work, scheduled or non-scheduled);
- (k) the incidents and observations, if any;
- (l) the signature of the person in charge.

(2) Entries in the journey log book shall be made currently and in ink or indelible pencil.

(3) A completed journey log book shall be retained for a period of 2 years and shall provide a continuous record of the operations for that period.

## **210. Records of emergency and survival equipment carried**

(1) An operator shall at all times have available for immediate communication to rescue coordination centers, lists containing information on the emergency and survival equipment carried on board an aeroplane engaged in air navigation.

(2) The information in subregulation (1) shall include, as applicable, the number, color and type of life rafts and pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of the emergency portable radio equipment.

## **211. Portable electronic devices**

A pilot in command (PIC) or any other crew member shall not permit any person to use, and a person shall not use on board an aircraft, a portable electronic device that may adversely affect the performance of aircraft systems and equipment unless—

- (a) the air operator certificate (AOC) holder makes a determination of acceptable devices and publishes that information in the operations manual for application by the crew members; and
- (b) the pilot in command (PIC) informs passengers of the permitted use.

## **212. Flight recorder records**

An operator shall—

- (a) to the extent possible, in the event that an aeroplane becomes involved in an accident or incident, ensure the preservation of all related flight recorder records and, if necessary, the associated flight recorders, and their retention in safe custody pending their disposition in

accordance with the **Civil Aviation (Aircraft Accident and Incident Investigation) Regulations 2020**;

- (b) ensure that all aeroplanes of a maximum take-off mass of over 5 700 kg are equipped with a crash-protected flight recorder which shall record the information displayed to the flight crew from electronic displays, as well as the operation of switches and selectors by the flight crew;
- (c) ensure that the minimum flight crew-machine interface recording duration is at least for the last two hours; and
- (d) ensure that the flight crew-machine interface recordings may be correlated to the recorded cockpit audio.

## PART X— CABIN CREW

### **213. Assignment of emergency duties**

In order to effect a safe and expeditious evacuation of an aeroplane, an operator shall for each type of aeroplane, based on the seating capacity or the number of passengers carried, establish and assign, to the satisfaction of the Authority, the minimum number of cabin crew required and the necessary functions to be performed in an emergency or a situation that requires emergency evacuation.

### **214. Cabin crew at emergency evacuation stations**

Each cabin crew member assigned to emergency evacuation duties shall occupy a seat provided in accordance with the **Civil Aviation (Instruments and Equipment) Regulation, 2020**, during take-off and landing and whenever the pilot-in-command so directs.

### **215. Arming of automatic emergency exits.**

A person shall not cause an aircraft carrying passengers to be moved on the surface, or to take-off or land unless each automatically deployable emergency evacuation assisting means installed on the aircraft is ready for evacuation.



## **216. Accessibility of emergency exits and equipment**

A person shall not allow carry-on baggage or other items to block access to the emergency exits when the aircraft is moving on the surface, or during take-off or landing, or while passengers remain on board.

## **217. Stops where passengers remain on board**

A pilot in command (PIC) shall ensure that where passengers remain on board an aircraft—

- (a) all engines are shut down;
- (b) at least one floor level exit remains open to provide for the evacuation of passengers where necessary; and
- (c) there is at least one person who is qualified in the emergency evacuation of the aircraft and who has been identified to the passengers on board as responsible for the passenger safety, immediately available.

(2) Where refuelling with passengers on board is done, the pilot in command (PIC) or a designated air operator certificate (AOC) holder's representative shall ensure that the procedure for refueling with passengers on board, in the air operator certificate (AOC) holder's operations manual are followed.

## **218. Protection of cabin crew during flight**

Each cabin crew member shall have his or her seat belt or, when provided, safety harness fastened during take-off and landing and whenever the pilot-in-command so directs.

## **219. Training**

(1) An operator shall establish and maintain a training programme, which shall be approved by the Authority, to be completed by all cabin crew members before being assigned their respective duties.

(2) The cabin crew members shall complete a recurrent training programme, every year.

## PART XI— SECURITY

### **220. Security of the flight crew compartment**

(1) In an aeroplane which is equipped with a flight crew compartment door, the flight crew compartment door shall be capable of being locked, and means shall be provided by which cabin crew can discreetly notify the flight crew of a suspicious activity or security breach in the cabin where this occurs.

(2) All passenger-carrying aeroplane—

(a) of a maximum certificated take-off mass in excess of 54 500 kg;

(b) of a maximum certificated take-off mass in excess of 45 500 kg with a passenger seating capacity of more than 19 passengers; or

(c) with a passenger seating capacity of more 60 passengers, shall be equipped with an approved flight crew compartment door that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons, and the door shall be capable of being locked and unlocked from either of the pilot stations.

(3) In an aeroplane which is required under subregulation (2) to be are equipped with a flight crew compartment door—

(a) the door shall be closed and locked from the time all the external doors are closed following embarkation until an external door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and

- (b) means shall be provided for monitoring from either of the pilot stations, the entire door area outside the flight crew compartment, to identify persons who request for entry and to detect suspicious behavior or potential threat.

## **221. Aeroplane search procedure checklist**

(1) The operator shall ensure that there is on board a checklist of the procedures to be followed in searching or inspecting aeroplanes for concealed weapons, explosives or other dangerous devices in cases of suspected sabotage or where a well-founded suspicion that the aeroplane may be the object of an act of unlawful interference exists.

(2) The checklist shall be supported by guidance on the appropriate course of action to be taken where a bomb or suspicious object is found and information on the least-risk bomb location specific to the aeroplane.

## **222. Security training programmes**

(1) The operator shall establish and maintain an approved security training programme which shall ensure that crew members act in the most appropriate manner to minimize the consequences of acts of unlawful interference.

(2) A security training programme shall include—

- (a) determination of the seriousness of any occurrence;
- (b) crew communication and coordination;
- (c) appropriate self-defense responses;
- (d) use of non-lethal protective devices to be assigned to crew members and whose use is authorized by the Authority;
- (e) understanding of behaviour of terrorists so as to facilitate the ability of crew members to cope with hijacker behaviour and passenger responses;
- (f) live situational training exercises regarding various threat conditions;

- (g) flight crew compartment procedures to protect the aeroplane; and
- (h) where practicable, aeroplane search procedures and guidance on least-risk bomb locations.

(3) The operator shall also establish and maintain a training programme to acquaint the appropriate employees with the preventive measures and techniques for the prevention of acts of sabotage or other forms of unlawful interference, in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on an aeroplane.

### **223. Reporting acts of unlawful interference**

Following an act of unlawful interference, the pilot-in-command shall submit, without delay, a report of such an act to the Authority or the designated responsible authority.

### **224. Miscellaneous**

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

(2) Where an operator accepts the carriage of weapons, removed from passengers, the aeroplane shall have provision for stowing such weapons in a place where they are not accessible to any person during flight time.

## **PART XII— DANGEROUS GOODS**

### **225. Operators with no approval to transport dangerous goods as cargo**

(1) The Authority shall ensure that an operator who is not approved to transport dangerous goods—

- (a) includes in the operator's operations manual, a dangerous goods training programme that meets—
  - (i) the requirements of the regulations on dangerous goods; and

- (ii) the applicable requirements of the technical instructions, as may be appropriate, and the details of the dangerous goods training programme;
- (b) establish dangerous goods policies and procedures in the operator's operations manual and that the policies and procedures include the requirements for the regulations on dangerous goods and the technical instructions which allow the personnel for the operator—
  - (i) to identify and reject undeclared dangerous goods, including COMAT classified as dangerous goods; and
  - (ii) where required, to report to the Authority and the appropriate authorities of the State in which the transportation of dangerous goods occurs, where undeclared dangerous goods are discovered in cargo or mail or where dangerous goods accidents or incidents occur.

## **226. Operators transporting dangerous goods as cargo**

(1) The Authority shall approve the transportation of dangerous goods and where the Authority approved the transportation, the Authority shall ensure that the operator—

- (a) establishes a dangerous goods training programme that meets the requirements in the Technical Instructions, and the requirements of the regulations for the transportation of dangerous good, as may be appropriate;
- (b) details and includes of the dangerous goods training programme in the operator's operations manuals;
- (c) establishes dangerous goods policies and procedures in its operations manual which at a minimum, meet the requirements of the regulations for dangerous goods and the Technical Instructions to enable the personnel of the operator to—

- (i) identify and reject undeclared or misdeclared dangerous goods, including COMAT classified as dangerous goods;
  - (ii) report to the Authority and the appropriate authorities of the State in which the transportation of dangerous goods occurs, where undeclared dangerous goods are discovered in cargo or mail or where dangerous goods accidents or incidents occur;
- (d) reports to the Authority and the State of Origin, any occasions where dangerous goods are discovered to have been carried—
  - (i) when not loaded, segregated, separated or secured in accordance with the Technical Instructions; and
  - (ii) without information on this being provided to the pilot-in-command;
- (e) accepts, handles, stores, transports, loads and unloads dangerous goods, including COMAT classified as dangerous goods, as cargo on board an aircraft; and
- (f) provides the pilot-in-command with accurate and legible written or printed information concerning dangerous goods that are to be carried as cargo.

## **227. Provision of information**

The operator shall ensure that all personnel, including third-party personnel, involved in the acceptance, handling, loading and unloading of cargo are informed of the operator's operational approval and limitations of transportation of dangerous goods.

## **228. Revocation**

The Civil Aviation (Operation of Aircraft) Regulations 2014 are revoked.

## **SCHEDULES**

### **SCHEDULE 1**

#### *Regulation 2*

A currency point is equivalent to twenty thousand shillings.

## SCHEDULE 2

*Regulation 75*

### ALTIMETRY SYSTEM PERFORMANCE REQUIREMENTS FOR OPERATIONS IN REDUCED VERTICAL SEPARATION MINIMUM (RVSM) AIRSPACE

1. In respect of groups of aeroplanes that are nominally of identical design and build with respect to all details that may influence the accuracy of height-keeping performance, the height-keeping performance capability shall be such that the total vertical error (TVE) for the group of aeroplanes shall have a mean no greater than 25 m (80 ft.) in magnitude and shall have a standard deviation no greater than  $28 - 0.013z^2$  for  $0 \leq z \leq 25$  when  $z$  is the magnitude of the mean TVE in meters, or  $92 - 0.004z^2$  for  $0 \leq z \leq 80$  where  $z$  is in feet and in addition, the components of TVE shall have the following characteristics—
  - (a) the mean altimetry system error (ASE) of the group shall not exceed 25 m (80 ft.) in magnitude;
  - (b) the sum of the absolute value of the mean ASE and of three standard deviations of ASE shall not exceed 75 m (245 ft.); and
  - (c) the differences between cleared flight level and the indicated pressure altitude actually flown shall be symmetric about a mean of 0 m, with a standard deviation no greater than 13.3 m (43.7 ft.), and in addition, the decrease in the frequency of differences with increasing difference magnitude shall be at least exponential.
2. In respect of aeroplanes for which the characteristics of the airframe and altimetry system fit are unique and so cannot be classified as belonging to a group of aeroplanes encompassed by paragraph 1, the height-keeping performance capability shall be such that the components of the TVE of the aeroplane have the following characteristics—
  - (a) the ASE of the aeroplane shall not exceed 60 m (200 ft.) in magnitude under all flight conditions; and
  - (b) the differences between the cleared flight level and the indicated pressure altitude actually flown shall be symmetric about a



mean of 0 m, with a standard deviation no greater than 13.3 m (43.7 ft.), and in addition, the decrease in the frequency of differences with increasing difference magnitude shall be at least exponential.

## SCHEDULE 3

### *Regulation 113*

#### ADDITIONAL REQUIREMENTS FOR APPROVED OPERATIONS BY SINGLE-ENGINE TURBINE-POWERED AEROPLANE AT NIGHT AND IN INSTRUMENT FLIGHT RULES

##### 1. TURBINE ENGINE RELIABILITY

(1) The turbine engine reliability shall be shown to have a power loss rate of less than 1 per 100 000 engine hours.

(2) An operator shall be responsible for engine trend monitoring.

(3) To minimize the probability of in-flight engine failure, the engine shall be equipped with—

- (a) an ignition system that activates automatically, or which is capable of being operated manually, for take-off, landing and during flight, in visible moisture;
- (b) a magnetic particle detection or equivalent system that monitors the engine, accessories gearbox, and reduction gearbox, and which includes a flight deck caution indication; and
- (c) an emergency engine power control device that permits continuing operation of the engine through a sufficient power range to safely complete the flight in the event of any reasonably probable failure of the fuel control unit.

##### 2. SYSTEMS AND EQUIPMENT

To ensure continued safe flight and to assist in achieving a safe forced landing after an engine failure under all allowable operating conditions, single-engine turbine-powered aeroplane approved to operate at night or under instrument flight rules (IFR) shall—

- (a) be equipped with—
  - (i) two separate electrical generating systems, with each system being capable of supplying all probable

combinations of continuous in-flight electrical loads for instruments, equipment and systems required at night or under instrument flight rules (IFR);

- (ii) §a radio altimeter;
  - (iii) an emergency electrical supply system of sufficient capacity and endurance, following loss of all generated power to as a minimum:
- (b) maintain the operation of all essential flight instruments, communication and navigation systems during a descent from the maximum certificated altitude in a glide configuration to the completion of a landing;
  - (c) lower the flaps and landing gear, if applicable;
  - (d) provide power to one pitot heater, which shall serve an air speed indicator clearly visible to the pilot;
  - (e) provide for operation of the landing light specified in paragraph (n);
  - (f) provide for one engine restart, if applicable;
  - (g) provide for the operation of the radio altimeter;
  - (h) have two attitude indicators, powered from independent sources;
  - (i) have means to provide for at least one attempt at engine re-start;
  - (j) maintain an airborne weather radar;
  - (k) maintain a certified area navigation system capable of being programmed with the positions of aerodromes and safe forced landing areas, and providing instantly available track and distance information to those locations;
  - (l) provide, for passenger operations, passenger seats and mounts which meet dynamically-tested performance standards and which are fitted with shoulder harnesses or a safety belts with diagonal shoulder straps;

- (m) in pressurized aeroplanes, provide sufficient supplemental oxygen for all occupants, for descent following engine failure at the maximum glide performance from the maximum certificated altitude to an altitude at which supplemental oxygen is no longer required;
- (n) provide a landing light that is independent of the landing gear and which is capable of adequately illuminating the touchdown area in a night forced landing; and
- (o) provide an engine fire warning system.

### 3. MINIMUM EQUIPMENT LIST

The Authority shall require the minimum equipment list of the operator approved in accordance with the regulations, to specify the operating equipment required for night and under instrument flight rules (IFR).

### 4. FLIGHT MANUAL INFORMATION

The flight manual shall include limitations, procedures, approval status and other information relevant to operations by single-engine turbine-powered aeroplanes at night or under instrument flight rules (IFR).

### 5. EVENT REPORTING

(1) The operator approved for operations by single-engine turbine-powered aeroplanes at night or under instrument flight rules (IFR) shall report all significant failures, malfunctions or defects to the Authority and the Authority shall notify the State of Design of the significant failures, malfunctions or defects.

(2) For purposes of ensuring that the intended level of safety is achieved, the Authority shall review the safety data and monitor the reliability information. (3) The Authority shall notify any major events or trends of particular concern to the appropriate type certificate holder and the State of Design.

## 6. OPERATOR PLANNING

(1) Operator route planning shall take account of all relevant information in the assessment of intended routes or areas of operations, including—

- (a) the nature of the terrain to be over flown, including the potential for carrying out a safe forced landing in the event of an engine failure or major malfunction;
- (b) weather information, including seasonal and other adverse meteorological influences that may affect the flight; and
- (c) other criteria and limitations specified by the Authority.

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

## 7. FLIGHT CREW EXPERIENCE, TRAINING AND CHECKING

(1) The Authority shall prescribe the minimum flight crew experience required for night or under instrument flight rules (IFR) operations by single-engine turbine-powered aeroplanes.

(2) The operator's flight crew training and checking shall be appropriate to night and under instrument flight rules (IFR) operations by single engine turbine-powered aeroplanes, covering normal, abnormal and emergency procedures and, in particular, engine failure, including descent to a forced landing in night and under instrument flight rules (IFR).

## 8. ROUTE LIMITATIONS OVER WATER

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

9. OPERATOR CERTIFICATION OR VALIDATION

The operator shall demonstrate the ability to conduct operations by single-engine turbine-powered aeroplanes at night or under instrument flight rules (IFR) through a certification and approval process specified by the Authority.

.....  
GEN. EDWARD KATUMBA – WAMALA (MP)  
*Minister of Works and Transport*

## **Cross references**

Civil Aviation (Aircraft Accident and Incident) Regulations, 2020  
Civil Aviation (Aircraft Maintenance Organization) Regulations, 2020  
Civil Aviation (Aircraft Registration and Marking) Regulations, 2020  
Civil Aviation (Airworthiness) Regulations, 2020  
Civil Aviation (Air operator Certification and Administration) Regulations, 2020  
Civil Aviation (Construction of Flight Procedures) Regulations, 2020  
Civil Aviation (Instrument and Equipment) Regulations, 2020  
Civil Aviation (Personnel Licensing) Regulations, 2020  
Civil Aviation (Rules of the Air) Regulations, 2020  
Civil Aviation (Safety Management Systems) Regulations, 2020

