S.I. 2007 No. 174

Civil Aviation Act
(Act 2004-18)

CIVIL AVIATION (AIRCRAFT OPERATIONS) REGULATIONS, 2007

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Civil Aviation Act
(Act 2004-18)

CIVIL AVIATION (AIRCRAFT OPERATIONS) REGULATIONS, 2007

The Minister in exercise of the powers conferred on him by section 88 of the *Civil Aviation Act*, makes the following Regulations:

PART I

Preliminary

Citation.

1. These Regulations may be cited as the *Civil Aviation (Aircraft Operations) Regulations, 2007*.

Interpretation.

2. In these Regulations,

"accident" means an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight until such time as all persons have disembarked, in which

(a) a person is fatally or seriously injured as a result of

(i) being in the aircraft;

(ii) direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or

(iii) direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

(b) the aircraft sustains damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft;

(c) the aircraft would normally require major repair or replacement of the affected component; except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tyres, brakes, fairings, small dents or puncture holes in the aircraft skin; or

(d) the aircraft is missing or is completely inaccessible;

"advisory airspace" means airspace of defined dimensions or designated routes, within which air traffic advisory services are 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;

"aerobatic flight" means manoeuvres intentionally performed by an aircraft involving an abrupt change in its altitude, an abnormal attitude or an abnormal variation in speed;

"aircraft" means any machine that is capable of deriving support in the atmosphere from reactions of the air, other than a machine designed to derive support in the atmosphere from reactions against the earth's surface of air expelled from the machine and includes a rocket;

"air operator" means any person, organisation or enterprise who undertakes to engage in domestic commercial air transport or international commercial air transport, whether directly or indirectly or by a lease in any other arrangement;

"air navigation facility" means any facility available for use or designed for use in aid of air navigation, including airports, landing areas, lights, any apparatus or equipment for signalling, for radio directional finding or for radio or other electrical communication and any other structure or mechanism having a similar purpose for guiding or controlling flight in the air or the landing and take-off of aircraft;

"airworthiness directives" means a document issued or adopted by the Director which mandates actions to be performed to restore an acceptable level of safety for an aircraft when evidence shows that the safety level may otherwise be compromised;

"airworthy" means an aircraft or aeronautical product is in a fit and safe state for flight and is in conformity with its type design;

"attitude" means the orientation of an aircraft with respect to the horizon, whether in level flight, turning or descending;

"Barbadian aircraft" means a civil aircraft registered in Barbados;

"cabin crew" means a person employed to facilitate the safety of passengers, whose duties are detailed by the air operator or the pilot in command;

"check airman" means a person who is qualified and permitted to conduct an evaluation in an aircraft, flight simulator, or a flight training device for a particular type aircraft or flight simulator, for a particular air operator;

"controlled flight" means any flight which is subject to an air traffic control clearance;

"crew" means any member of the flight crew or cabin crew;

"critical engine" means the engine of an aircraft, the failure of which would most adversely affect the performance or handling qualities of an aircraft;

"critical phases of flight" means those portions of operations involving taxiing, take-off and landing and all flight operations below 10 000 feet, except cruise flight;

"dangerous goods" means articles or substances which are capable of posing significant risks to health, safety or property when transported by air;

"dangerous goods accident" means an occurrence associated with and related to the transport of dangerous goods which results in fatal or serious injury to a person or major property damage;

"dangerous goods incident" means an occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods not necessarily occurring on board an aircraft, which results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained or any occurrence relating to the transport of dangerous goods which seriously jeopardises the aircraft or its occupants;

"dangerous goods transport document" means a document specified by the Technical Instructions that bears a signed declaration indicating that the dangerous goods are fully and accurately described by their proper shipping names and the four-digit number assigned by the *United Nations Committee of Experts on the Transport of Dangerous Goods*, to identify a substance or a particular group of substances where assigned, and that they are correctly classified, packed, marked, labelled and in a proper condition for transport;

"day" means the period of elapsed time, using co-ordinated universal time or local time that begins at midnight and ends 24 hours later at the next midnight;

"defined point after take-off," means the point within the takeoff and initial climb phase, before which the ability of a Performance Class II helicopter to continue the flight safely with one engine inoperative is not assured, and a forced landing may be required;

"defined point before landing" means the point within the approach and landing phase of an aircraft, after which a forced landing may be required;

"duty" means any continuous period during which a crew member is required to carry out any task associated with the business of an air operator;

"effective length of the runway" means the distance for landing from the point at which the obstruction clearance plane associated with the approach end of the runway intersects the centerline of the runway to the far end;

"extended over water operation" means

(a) in the case of a single-engine land plane, a distance of more than one hundred nautical miles from land suitable for making an emergency landing; or

(b) in the case of a multi-engine land plane, a distance of more than two hundred nautical miles from land suitable for making an emergency landing with the capability of continuing flight with one engine inoperative;

"flight" means one or more sectors and defined by a flight number;

"flight crew" means those members of the crew of an aircraft who act as pilot in command, co-pilot or flight engineer;

"flight duty period" means any time during which a person operates in an aircraft as a member of its crew and begins when the crew member is required by the air operator to report for a flight duty and finishes at the end of flight time on the final sector;

"flight manual" means a manual associated with the certificate of airworthiness that contains the limitations within which an aircraft is to be considered airworthy and instructions and the information

necessary to the flight crew members for the safe operation of the aircraft;

"flight plan" means specified information provided to Air Traffic Services Units, relative to an intended flight or portion of a flight of an aircraft, and may mean variously, full information on all items comprised in the flight plan description, covering the whole route of a flight or limited information required when the purpose is to obtain a clearance for a minor portion of a flight such as to cross an airway, to take-off from or to land at a controlled airport;

"Flight Test Examiner" means a person designated by the Director, to conduct an evaluation in an aircraft, in a flight simulator or in a flight training device for a particular type aircraft, for a particular air operator or approved Aviation Training Organisation;

"flight time" means the total time from the moment an aeroplane first moves under its own power for the purpose of taking off until the moment it finally comes to rest at the end of flight;

"flight time (helicopter)" means the total time from the moment a helicopter first moves under its own power for the purpose of taking off until the rotors are next stopped;

"freight container" means an article of transport equipment for radioactive materials, designed to facilitate the transport of such materials, either packaged or unpackaged, by one or more modes of transport;

"general aviation operation" means an aircraft operation other than a commercial air transport operation or an aerial work operation;

"handling agent" means an agency which performs on behalf of the operator some or all of the latter's functions including receiving, loading, unloading, transferring or other processing of passengers or cargo;

"helideck" means a heliport located on a floating or fixed offshore structure;

"heliport" means an airport or defined area on a structure intended to be used wholly or in part for the arrival, departure, and surface movement of helicopters;

"incident" means an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation;

"journey log" means a form signed by the pilot in command of each flight that records the registration of the aircraft, crew member names and duty assignments, the type of flight, and the date, place, and time of arrival and departure;

"landing decision point" means the point used in determining landing performance where, should an engine failure occur, the landing may be safely continued or a balked landing initiated;

"line operating flight time" means flight time recorded by the pilot in command or co-pilot while conducting commercial operations for an air operator;

"master minimum equipment list" means a list of equipment established by a manufacturer of an aircraft for a particular aircraft type with the approval of the State of manufacture, containing items one or more of which is permitted to be unserviceable at the commencement of a flight, it may be associated with special operating conditions, limitations or procedures and provides the basis for development, review, and approval by the Director of the minimum equipment list of an individual operator;

"national air operator" means a person, organisation or enterprise who has been issued a Barbados air operator's certificate in accordance with the *Civil Aviation (Air Operator Certification and Administration) Regulations 2007*; S.I. 2007 No. 173.

"occurrence" includes an incident, serious incident or accident;

"operator" means a person, organisation or enterprise engaged in or offering to engage in aircraft operations and any person

(a) who causes or authorises the operation of an aircraft, in the capacity of owner, lessee, or otherwise whether with or without the control of the aircraft;

(b) who or which is deemed to be engaged in the operation of aircraft within the meaning of the *Civil Aviation Act, 2004*;

Act 2004-18.

"operational flight plan" means the plan of an operator for the safe conduct of flight based on considerations of aircraft performance, other operating limitations, and relevant expected conditions on the route to be followed and at the airports or heliports concerned;

"package" means the complete product of the packing operation consisting of the packaging and its contents prepared for transport;

"packaging" means receptacles and any other components or materials necessary for the receptacle to perform its containment function and to ensure compliance with the packing requirements;

"passenger exit seats" means those seats from which a passenger can proceed directly to the exit without entering an aisle or passing around an obstruction and those seats in a row of seats through which passengers would have to pass to gain access to an exit, from the first seat inboard of the exit to the first aisle inboard of the exit;

"proper shipping name" means the name to be used to describe a particular article or substance in all shipping documents and notifications and, where appropriate, on packaging;

"positioning" means the practice of transferring crews from place to place as passengers in surface or air transport on behalf of the air operator;

"reporting time" means the time at which a crew member is required by the air operator to report for duty;

"reserve duty" means a period during which the air operator requires a crew member who would otherwise be off-duty to be available for flight duty;

"rest period" means a period of time before starting a flying duty period that is designed to give crew members adequate opportunity to rest before a flight;

"rostered duty" means a planned duty period or series of duty periods with stipulated start and finish times, notified by the air operator to crews in advance;

"rostering period" means a period of consecutive days which the air operator shall roster duty and rest periods notified by the air operator in advance;

"scheduled duty" means the allocation of specific flights or other duties to a crew member within the pre-notified rostered series of duty periods;

"sector" means the time between an aircraft moving under its own power until it next comes to rest after landing at the designated parking position;

"serious incident" means an incident involving circumstances indicating that an accident nearly occurred;

"serious injury" means an injury which is sustained by a person in an accident and which

(a) requires hospitalisation for more than 48 hours, commencing within 7 days from the date the injury was received;

(b) results in a fracture of any bone (except simple fractures of fingers, toes or nose);

(c) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage;

(d) involves injury to any internal organ;

(e) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or

(f) involves verified exposure to infectious substances or injurious radiation;

"short haul operation" means flights where the origins and destinations are less than 3 hours time change apart;

S.I. 2007 No. 175.

"special flight permit" means a permit issued by the Director in accordance with the *Civil Aviation (Airworthiness) Regulations, 2007* in respect of an aircraft that is capable of safe flight, but unable to meet applicable airworthiness requirements;

"split duty" means a flying duty period which consists of two or more sectors separated by less than a minimum rest period;

"State of Origin" means the State in which dangerous goods were first loaded on an aircraft;

"suitable accommodation" means a furnished bedroom which is subject to minimum noise, is well ventilated and has the facility to control the levels of light and temperature;

"take-off decision point" means the point used in determining take-off performance of a Performance Class I helicopter from which, an engine failure occurring at that point, either a rejected take-off may be made or a take-off safely continued;

"Technical Instructions" means the International Civil Aviation Organisation Technical Instructions for the safe transport of dangerous goods by air;

"travelling" means all time spent by the crew member transiting between the place of rest and the place of reporting for duty and does not count as duty time;

"unit load device" means any type of aircraft container for baggage or freight, aircraft pallet with a net, or aircraft pallet with a net over an igloo; and

"VHF Omni Range" means a ground based radio navigation equipment capable of giving visual indications in the cockpit bearings by means of signals received from very high frequency omni-directional radio ranges.

Applicability of Regulations.

3. (1) These Regulations prescribe the requirements for

(a) operations conducted on a Barbadian aircraft by airmen and operators certified by the Director;

(b) the use of foreign registered aircraft by national air operators;

(c) operations of aircraft within Barbados by airmen or air operators of a foreign State.

(2) Operators of Barbadian aircraft and flight crew licensed in Barbados, operating outside of Barbados, shall comply with the requirements under these Regulations unless such compliance would violate any law of the foreign State in which the operation is conducted.

PART II

General Administration Practices for all Aviation Documents

Requirements for registration markings.

4. No person shall operate an aircraft, unless the aircraft displays the proper markings prescribed under the *Civil Aviation (Registration and Markings) Regulations, 2007* and in the case of a foreign registered aircraft, markings approved by the State of Registry.

Restrictions on the operation of aircraft.

5. (1) No person shall operate an aircraft in Barbados unless it is in an airworthy condition.

(2) Prior to initiating flight, a pilot in command shall determine whether an aircraft is in a condition for safe flight.

(3) The pilot in command shall discontinue a flight as soon as practicable when a mechanical, electrical or structural condition occurs that would render the aircraft no longer airworthy.

Special flight permit operational restrictions. S.I. 2007 No. 175.

6. Where a Barbadian aircraft is issued a special flight permit in accordance with the *Civil Aviation (Airworthiness) Regulations, 2007* a person shall operate such aircraft in accordance with the limitations issued with such special flight permit.

Required aircraft instruments and equipment. S.I. 2007 No. 178.

7. No person shall operate a Barbadian aircraft unless it is equipped with the required instruments and navigation equipment appropriate to the type of flight operations conducted and the route being flown, as prescribed under the *Civil Aviation (Instruments and Equipment) Regulations, 2007*.

Restrictions on the use of inoperative instruments and equipment.

8. (1) No person shall take-off in an aircraft with inoperative instruments or equipment installed, except as authorised by the Director.

(2) No person shall operate an aircraft in commercial air transport with inoperative instruments and equipment installed unless maintenance on those items has been properly deferred in accordance with a current minimum equipment list approved by the Director for that aircraft.

Required aircraft flight manual, marking and placard requirements.

9. (1) No person shall operate a Barbadian aircraft unless there is available in such aircraft

(a) a current Aircraft Flight Manual; and

(b) an aircraft operating manual approved by the Director for the national air operator.

(2) Where an Aircraft Flight Manual required by paragraph (1)*(a)*, does not exist, another

(a) manual;

(b) document;

(c) instruction;

(d) necessary information;

(e) markings and placards; or

(f) any combination thereof;

that is approved or accepted by the Director and which provides the pilot in command with the necessary limitations for safe operation, shall be on board such aircraft.

(3) No person shall operate an aircraft within or over Barbados without complying with the operating limitations specified

(a) in the Aircraft Flight Manual;

(b) on the markings of the aircraft;

(c) on placards in the aircraft; or

(d) by the certifying authority for the State of Registry of the aircraft.

(4) An operator shall display in his aircraft all placards, listings, instrument markings or combination thereof, containing those operating limitations prescribed by the certifying authority for the State of Registry of the aircraft.

Required aircraft and equipment inspections.

10. (1) Unless otherwise authorised by the Director, no person shall operate a Barbadian aircraft unless it has had the following inspections:

(a) an annual inspection within the past 12 months;

(b) a 100-hour inspection, where the aircraft is used in commercial operations;

(c) an altimeter and pitot-static system inspection in the past 24 months where the aircraft is being operated under instrument flight rules;

(d) a transponder check within the past 12 months, for transponder equipped aircraft; and

(e) an emergency locating transmitter check within the past 12 months, for emergency locating transmitter equipped aircraft.

(2) An aircraft maintained under an alternate maintenance and inspection programme approved by the Director, may not have current annual or 100-hour inspections in its maintenance records.

(3) An alternate maintenance and inspection programme under paragraph (2), may include a recommended programme of the manufacturer, instructions for continued airworthiness or a programme designed by the operator and approved by the Director.

Documents to be carried on aircraft for all operations.

11. (1) Except as provided in regulation 9, no person shall operate an aircraft unless such aircraft has on board, the following current documents in respect of such aircraft except those current documents marked with an asterisk (*), are required for operators other than air operators:

(a) *aircraft registration certificate issued to the owner;

(b) *certificate of airworthiness;

(c) *aircraft journey log;

(d) *aircraft radio licence;

(e) *list of passenger names and points of embarkation and destination;

(f) cargo manifest including special loads information;

(g) for the air operator, an aircraft technical log;

(h) noise certificate issued by the manufacturer;

(i) *Aircraft Flight Manual or equivalent document under regulation 9;

(j) *the part of the operations manual relevant to operation being conducted;

(k) for an air operator, minimum equipment list;

(l) operational flight plan;

(m) filed air traffic control flight plan;

(n) notices to airmen briefing documentation;

(o) meteorological information;

(p) mass and balance documentation otherwise referred to as "load sheet";

(q) listing of special situation passengers;

(r) procedures and signals for intercepted aircraft;

(s) *current and suitable maps and charts for routes of proposed flight or possibly diverted flights;

(t) forms for complying with the reporting requirements of the Director and the air operator;

(u) for international flights, a general declaration for customs;

(v) any documentation which may be required by the Director or State concerned with the proposed flight;

(w) *certificate of insurance for the aircraft; and

(x) Category II and Category III manuals for general aviation operations.

(2) The Director may permit the information required under paragraph (1) to be presented in a form other than printed paper where accepted by the Director.

(3) The noise certificate referred to in paragraph (1)*(h)*, shall state the applicable Standards set out in Annex 16, Volume 1 of the Chicago Convention, and may be contained in any other document referred to in paragraph (1) that is approved by the Director.

(4) The operator of an aircraft shall ensure an acceptable standard of accessibility, usability and reliability in respect of the operational flight plan referred to in paragraph (1)*(l)*.

(5) In this Regulation "special situation passengers" includes armed security personnel, deportees, persons in custody and persons with special medical needs.

Approval to transport dangerous goods.

12. (1) No operator shall transport dangerous goods unless the Director so approves in writing.

(2) Where an operator wishes to transport dangerous goods he shall apply to the Director for approval to do so.

(3) Where approval is granted for an operator to transport dangerous goods, the continued validity of such approval shall be dependent upon

(a) the operator remaining in compliance with these Regulations; and

(b) the Director being granted access to the facilities of the organisation to determine continued compliance with these Regulations.

Provisions for safe transport of dangerous goods.

13. (1) An operator shall comply with the provisions contained in Annex 18 of the Chicago Convention on all occasions when dangerous goods are carried, irrespective of whether the flight is wholly or partly within or wholly outside Barbados.

(2) Where dangerous goods are to be transported outside of Barbados, the operator shall review and comply with the appropriate variations notified by Contracting States contained in the Attachment to the Technical Instructions.

(3) Articles and substances which would otherwise be classified as dangerous goods are excluded from the provisions of these Regulations, to the extent specified in the Technical Instructions.

Specific goods not to be transported.

14. (1) An operator shall take all reasonable measures to ensure that articles and substances that are specifically identified by name or generic description in the Technical Instructions, as being forbidden for transport under any circumstances, are not carried on any aircraft.

(2) An operator shall take all reasonable measures to ensure that articles and substances or other goods that are identified in the Technical Instructions as being forbidden for transport in normal circumstances are transported only when

(a) they are exempted by the States concerned under the provisions of the Technical Instructions; or

(b) the Technical Instructions indicate that they may be transported under an approval issued by the State of Origin.

Classification of dangerous goods.

15. An operator shall take all reasonable measures to ensure that articles and substances are classified as dangerous goods as specified in the Technical Instructions.

Packing of dangerous goods.

16. An operator shall take all reasonable measures to ensure that dangerous goods are packed as specified in the Technical Instructions.

Labelling and marking of dangerous goods.

17. (1) An operator shall take all reasonable measures to ensure that packages, overpacks and freight containers are labelled and marked as specified in the Technical Instructions.

(2) Where dangerous goods are carried on a flight, which takes place wholly or partly outside the territory of Barbados, the operator shall ensure that labelling and marking are in the English Language in addition to any other language requirements.

Requirement for a dangerous goods transport document.

18. (1) An operator shall ensure that, except when otherwise specified in the Technical Instructions, dangerous goods are accompanied by a dangerous goods transport document which shall contain information specified in the Technical Instructions.

(2) The dangerous goods transport document referred to in paragraph (1), shall bear a declaration signed by the person who offers the dangerous goods for transport, indicating that the dangerous goods are fully described by their proper shipping names and that they are classified, packed, marked, labelled and are in proper condition for transport by air in accordance with the Technical Instructions.

(3) Where dangerous goods are carried to a place wholly or partly outside the territory of a State, the operator shall ensure that the English Language is used for the transport document in addition to any other language requirements.

Restrictions on the acceptance of dangerous goods by an operator or his handling agent.

19. (1) No operator or his handling agent, shall accept dangerous goods for transport until the package, overpack or freight container has been inspected in accordance with the acceptance procedures set out in the Technical Instructions.

(2) An operator, or his handling agent, shall use an acceptance check list which shall

(a) allow for all relevant details to be checked; and

(b) be in such form as will allow for the recording of the results of the acceptance check by manual, mechanical or computerized means.

(3) For the purpose of this Part "overpack" means an enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and storage.

Inspection for damage, leakage or contamination by dangerous goods.

20. An operator shall ensure that

(a) packages, overpacks and freight containers are inspected for evidence of leakage or damage immediately prior to loading on an aircraft or into a unit load device, as specified in the Technical Instructions;

(b) a unit load device is not loaded on an aircraft unless it has been inspected as required by the Technical Instructions and found free from any evidence of leakage from, or damage to, the dangerous goods contained therein;

(c) leaking or damaged packages, overpacks or freight containers are not loaded on an aircraft;

(d) any package of dangerous goods found on an aircraft and which appears to be damaged or leaking is removed or arrangements are made for its removal by an appropriate authority or organisation;

(e) after removal of any leaking or damaged goods, the remainder of the consignment is inspected to ensure it is in a proper condition for transport and that no damage or contamination has occurred to the aircraft or its load; and

(f) packages, overpacks and freight containers are inspected for signs of damage or leakage upon unloading from an aircraft or from a unit load device and, where there is evidence of damage or leakage, the area where the dangerous goods were stowed is inspected for damage or contamination.

Removal of contamination by dangerous goods.

21. An operator shall ensure that

(a) any contamination found as a result of the leakage or damage of dangerous goods is removed without delay; and

(b) an aircraft which has been contaminated by radioactive materials is immediately taken out of service and not returned until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions.

Loading restrictions for dangerous goods.

22. (1) An operator shall ensure that dangerous goods are not carried in an aircraft cabin occupied by passengers or in the cockpit, unless otherwise specified in the Technical Instructions.

(2) An operator shall ensure that dangerous goods are protected from damage when loading, segregating, stowing and securing such dangerous goods on an aircraft as specified in the Technical Instructions.

(3) An operator shall ensure that packages of dangerous goods bearing the "Cargo Aircraft Only" label are carried on a cargo aircraft and loaded as specified in the Technical Instructions.

Provision of information in respect of dangerous goods by operator.

23. (1) An operator shall ensure that

(a) information is provided to enable ground staff to carry out their duties with regard to the transport of dangerous goods, including the actions to be taken in the event of incidents and accidents involving dangerous goods; and

(b) where applicable, the information referred to in paragraph *(a)*, is also provided to his handling agent.

(2) A national air operator shall ensure that information is promulgated as required by the Technical Instructions so that passengers are warned as to the types of goods which they are forbidden from transporting as checked baggage or carry on luggage.

(3) A national air operator and, where applicable, his handling agent, shall ensure that notices are provided at check-in points for cargo giving information about the transport of dangerous goods.

(4) An operator shall ensure that information is provided in his operations manual to enable crew members to carry out their responsibilities in regard to the transport of dangerous goods, including the actions to be taken in the event of emergencies involving dangerous goods which may arise.

(5) An operator shall ensure that the pilot in command is provided with written information on the details in respect of the dangerous goods on board as early as practicable before flights in the manner specified in the Technical Instructions.

(6) Where dangerous goods are on board an aircraft and an aircraft accident occurs, the operator of such aircraft shall

(a) as soon as possible, inform the appropriate authority of the State in which the aircraft accident occurred of any dangerous goods carried; and

(b) on request, provide any information required to minimize the hazards created by any dangerous goods carried.

Requirement for dangerous goods training programme.

24. (1) An operator shall establish, maintain and have approved by the Director, an initial and recurrent dangerous goods training programme, as required by the Technical Instructions in respect of his operations.

(2) Notwithstanding the generality of paragraph (1), an operator who does not hold an approval to carry dangerous goods under regulation 12 shall ensure that

(a) staff who are engaged in general cargo handling have received training to carry out their duties in respect of dangerous goods which cover as a minimum, the areas identified under paragraph (1), to an extent sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods and how to identify the goods;

(b) crew members, passengers and ground handling staff and security staff employed by the national air operator who deal with the screening of passengers and their baggage, have received training which covers as a minimum, the areas identified in paragraph (1), to an extent sufficient to ensure that an awareness is gained

(i) of the hazards associated with dangerous goods;

(ii) how such goods are identified; and

(iii) what requirements apply to the carriage of the goods referred to in regulation 13.

25. (1) An operator shall report a dangerous goods incident and accident to the Director within 72 hours of the event, unless exceptional circumstances prevent such a report. Dangerous goods incident and accident reports.

(2) A report referred to in paragraph (1), shall be made in the form prescribed by the Director and shall be processed in accordance with established and approved procedures.

PART III

Aircraft Maintenance Requirements

26. (1) This Part applies to all general aviation and large complex aircraft operated in Barbados whether or not the aircraft is registered in Barbados. Applicability of Part III.

(2) Regulations 28 and 29 do not apply to an aircraft subject to an approved continuous maintenance programme approved by the Director for a national air operator under *Civil Aviation (Air Operator Certification and Administration) Regulations, 2007*. S.I. 2007 No.173.

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

27. (1) An operator of an aircraft shall be primarily responsible for maintaining the aircraft in an airworthy condition, including complying with all airworthiness directives. General requirements in respect of aircraft.

(2) No person shall perform maintenance, preventive maintenance, or alterations to an aircraft other than as prescribed by these Regulations, the Act or other regulations made thereunder.

(3) No person shall certify an aircraft as airworthy unless he is qualified in accordance with the Act or regulations made thereunder to issue such certification.

(4) No person shall operate an aircraft for which a maintenance manual of the manufacturer or instructions for continued airworthiness containing an airworthiness limitations section has been issued unless

(a) the mandatory replacement times;

(b) inspection intervals; and

(c) related procedures set forth in the specific operating provisions, are approved by the Director under the Act or regulations made thereunder.

Requirements of operator in respect of aircraft.

28. An operator shall

(a) have his aircraft inspected as prescribed under this Part and discrepancies rectified as required under the Performance Rules prescribed under the Act or regulations made thereunder;

(b) inspect, repair, replace or remove an inoperative instrument or item of equipment at the next required inspection, except when permitted under the provisions of an approved minimum equipment list;

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

(d) ensure that all maintenance, overhaul, alterations and repairs that affect airworthiness are performed as prescribed in accordance with the Act or regulations made thereunder;

(e) ensure that maintenance personnel make appropriate entries in the maintenance records in accordance with this Part; and

(f) ensure that the appropriate maintenance personnel complete and sign the certificate of release to service, after the maintenance has been accomplished satisfactorily and in accordance with prescribed methods.

Requirements for inspection of aircraft.

29. (1) Except as provided in paragraph (6), a person shall not operate an aircraft unless, within the preceding 12 months, the aircraft has been inspected in accordance with this Regulation and has had

(a) an annual inspection in accordance with the Act or regulations made thereunder and has been issued a certificate of release to service by a person authorised under the Act or regulations made thereunder; or

(b) an inspection for the issuance of a certificate of airworthiness in accordance with the Act or regulations made thereunder.

(2) An inspection performed in paragraph (1)*(b)*, shall not be substituted for any other inspection required by this Regulation unless it is performed by a person authorised to perform annual inspections and is entered as an "annual" inspection in the required maintenance record.

(3) Except as provided in paragraph (6), no person shall

(a) operate for hire an aircraft carrying any person, other than a crew member; or

(b) give flight instruction in an aircraft which that person provides,

unless within the preceding 100 hours of time in service, the aircraft has

(c) received an annual or 100 hour inspection and has been issued a certificate of release to service in accordance with the Act or regulations made thereunder;

(d) received an inspection for the issuance of an airworthiness certificate in accordance with the Act or regulations made thereunder.

(4) The 100 hour limitation referred to in paragraph (3), may be exceeded by no more than 10 hours while en route to reach a place where the inspection can be done.

(5) The excess time referred to in paragraph (4) that is used to reach a place where the inspection can be done, shall be included in computing the next 100 hours of time in service.

(6) Paragraphs (1) through (5), shall not apply to

(a) an aircraft that carries a special flight permit;

(b) an aircraft subject to the requirements of paragraph (7) or (9); or

(c) turbine-powered rotorcraft, when the operator elects to inspect such rotorcraft in accordance with paragraph (9).

(7) An operator of an aircraft desiring to use a progressive inspection programme shall submit a written request to the Director.

(8) A written request submitted pursuant to paragraph (7), shall be accompanied by

(a) details of

(i) the aircraft maintenance engineer who shall be conducting inspections and maintenance and who holds the appropriate type rating required by the Act or regulations made thereunder;

(ii) the approved aircraft maintenance organisation appropriately rated in accordance with the Act or regulations made thereunder; or

(iii) the manufacturer of the aircraft who will be supervising or conducting the progressive inspection where applicable;

(b) a current inspection procedures manual that is available and readily understandable to the flight crew and maintenance personnel that shall contain

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

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

(iii) a sample of the routine and detailed inspection form and instructions for its use; and

(iv) a sample of the report, record and instructions for their use;

(c) details of the housing and equipment required for disassembly and proper inspection of the aircraft; and

(d) appropriate current technical information for the aircraft.

(9) An operator of a large aeroplane, turbojet multi-engine aeroplane, turbo propeller-powered multi-engine aeroplane and turbine-powered rotorcraft shall select and use one of the following programmes appropriate to the aircraft:

(a) a current inspection programme recommended by the manufacturer;

(b) a continuous maintenance programme that is part of a continuous maintenance programme for that make and model of aircraft currently approved by the Director for use by an operator; or

(c) any other inspection programme established by the operator of that aircraft and approved by the Director.

(10) An operator shall

(a) include in the programme referred to in paragraph (9), the name and address of the person responsible for the scheduling of the inspections required by the programme; and

(b) provide a copy of the programme referred to in paragraph (9), to the person performing inspection on the aircraft.

(11) No person shall issue a certificate of release to service an aircraft unless the replacement times for life-limited parts specified in the aircraft specification-type data sheets are complied with and the aircraft, and its associated aeronautical products including survival and emergency equipment are inspected in accordance with an inspection programme referred to in paragraph (9).

(12) A person wishing to establish or change an approved inspection programme shall submit the new programme to the Director for approval.

(13) A request for an approval referred to in paragraph (12), shall be accompanied by

(a) instructions and procedures for the conduct of inspection for the particular make and model aircraft, including necessary tests and checks and details of the parts and areas of the aeronautical products, including survival and emergency equipment required to be inspected; and

(b) a schedule of the inspections required to be performed which may be expressed in terms of time in service, time and cycles of operation or any combination thereof.

(14) Where an operator changes from one inspection programme to another, he shall apply the time in service, calendar times, or cycles of

operation accumulated under the previous programme in determining when an inspection becomes due under the new programme.

(15) The frequency and detail of the progressive inspections under this Regulation shall be as set out in the Aircraft Operations Standards.

Required changes to aircraft inspection programmes.

30. (1) Where the Director finds a revision to an approved inspection programme is necessary for the continued adequacy of such programme, he shall notify the operator of the changes required to the inspection programme prior to its approval.

(2) Where an operator receives a notification referred to in paragraph (1), he shall make any change in the inspection programme as recommended by the Director.

(3) Notwithstanding paragraph (2), an operator may petition the Director to reconsider the notification, within 30 days of receipt thereof.

(4) A petition referred to in paragraph (3), shall include justification or an alternate method of compliance with an equivalent level of safety being maintained for the decision to be revoked.

(5) Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notification pending a decision by the Director.

Owner, lessee or operator to keep maintenance records.

31. (1) An operator of an aircraft shall keep a maintenance record of

(a) the entire aircraft to include

(i) the total time in service which shall include hours, calendar time and cycles, as appropriate, of the aircraft and all life limited parts;

(ii) the current inspection status of the aircraft, including the time since required or approved inspection was last performed;

(iii) the current empty mass and the location of the centre of gravity when empty;

(iv) addition or removal of equipment;

(v) the type and extent of maintenance and alteration, including the time in service and date;

(vi) the date when work was performed; and

(vii) a chronological list of compliance with airworthiness directives, including methods of compliance;

(b) life limited aeronautical products including survival and emergency equipment to include

(i) total time in service;

(ii) date of the last overhaul;

(iii) time in service since the last overhaul; and

(iv) date of the last inspection;

(c) instruments and equipment, the serviceability and operating life of which are determined by their time in service to include

(i) records of the time in service as are necessary to determine their serviceability or to compute their operating life; and

(ii) date of last inspection.

Owner, lessee or operator to retain maintenance records.

32. (1) Except for records maintained by an Approved Maintenance Organisation, an operator shall retain, until the work is repeated or superseded by other work of equivalent scope and detail, the following:

(a) records of the maintenance, preventive maintenance, minor modifications, and records of the 100 hour annual and other

required or approved inspections, as appropriate for each aircraft, including the airframe and each engine, propeller, rotor and appliance of an aircraft to include

(i) a description or reference to data acceptable to the Director of the work performed;

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

(iii) the signature and licence number of the person issuing the certificate of release to service;

(b) records containing the following information:

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

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

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

(iv) the addition and removal of equipment;

(v) the current empty mass and the location of the center of gravity of the aircraft when empty;

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

(vii) the current status of applicable airworthiness directives including, for each the method of compliance, the airworthiness directive number, and revision date;

(viii) where the airworthiness directive involves recurring action, the time and date when the next action is required; and

(ix) copies of the prescribed forms for each major repair and major modification to the airframe and currently installed engines, rotors, propellers, and appliances.

(2) The records specified in paragraph (1), shall be retained and transferred with the aircraft at the time the aircraft is sold or leased.

(3) An operator shall make all maintenance records required by this Regulation available for inspection by the Director.

(4) The records specified in paragraph (1), shall be preserved by an operator for 2 years after the aircraft has been permanently withdrawn from service or destroyed.

Procedure on transfer of maintenance records.

33. An operator who sells or leases a Barbadian aircraft shall transfer to the purchaser or lessor at the time of sale or lease, the records identified in regulation 32 in respect of the aircraft in plain language form or in coded form at the option of the purchaser or lessor, where the coded form provides for the preservation and retrieval of information in a manner acceptable to the Director.

PART IV

Flight Crew Requirements

Composition of the flight crew.

34. (1) An operator shall ensure that

(a) the number and composition of the flight crew is no less than specified in the Aircraft Flight Manual;

(b) all flight crew hold an applicable and valid licence acceptable to the Director and are suitably qualified and competent to conduct the duties assigned to them;

(c) procedures are established that are acceptable to the Director and that prevent the crewing together of inexperienced flight crew;

(d) one pilot amongst the flight crew, qualified as a pilot in command, is designated as the pilot in command who may delegate the conduct of the flight to another qualified pilot;

(e) where a dedicated system panel operator is required by the Aircraft Flight Manual, the flight crew includes one crew member who holds a flight engineer licence issued under the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007* or suitably qualified flight crew acceptable to the Director; S.I. 2007 No. 172.

(f) when engaging the services of flight crew who are self-employed or working on a freelance or part-time basis, all applicable flight crew requirements are complied with;

(g) attention is paid in respect of paragraph *(f)*, to the total number of aircraft types or variants including when his services are engaged by operators that flight crew members may fly for the purpose of commercial air transport;

(h) a co-pilot is included as part of the flight crew in commercial air transport operations under instrument flight rules, unless the Director has issued a deviation.

(2) Notwithstanding the minimum number and composition of flight crew specified in an Aircraft Flight Manual, where the Director is of the opinion that considerations related to

(a) the type of aircraft used;

(b) the type of operation involved; and

(c) the duration of flight between points where flight crews are changed,

require that the number and composition of the flight crew should exceed the number specified in such Aircraft Flight Manual, the Director may increase the minimum number of flight crew required for this operation.

(3) An operator shall ensure the revised minimum number and composition of flight crew set out in paragraph (2) is met.

(4) For operations under instrument flight rules, or at night, an operator shall ensure that

(a) for all turbo-propeller aircraft with an approved passenger seating configuration of more than 9, the minimum flight crew shall be 2 pilots; or

(b) for all turbojet aircraft, the minimum flight crew shall be 2 pilots.

(5) Where an aircraft other than those covered by paragraph (4)*(a)* and *(b)*, is operated by a single pilot, the operator shall ensure that

(a) the operations manual conversion and recurrent training programme includes the additional requirements for a single pilot operation;

(b) the cockpit procedures include

(i) engine management and emergency handling;

(ii) use of normal, abnormal and emergency check lists;

(iii) air traffic control communication;

(iv) departure and approach procedures;

(v) auto-pilot management; and

(vi) use of simplified in-flight documentation;

(c) the recurrent checks required by regulation 260 shall be performed in the single-pilot role on the type or class of aircraft in an environment representative of the operation;

(d) the pilot shall have a minimum of 50 hours flight time on the specific type or class of aircraft under instrument flight rules of which 10 hours shall be as pilot in command; and

(e) the minimum required recency experience for a pilot engaged in a single-pilot operation under instrument flight rules or at night shall be 5 instrument flight rules flights, including 3 instrument approaches, carried out during the preceding 90 days on the type or class of aircraft in the single-pilot role.

(6) The requirement referred to in paragraph (5)*(e)* may be met by using an instrument flight rules instrument approach check on the type or class of aircraft.

(7) An operator shall ensure that where the requirements under paragraph (5) are not satisfied, the minimum flight crew shall be 2 pilots.

Operator to ensure flight crew qualifications.

35. (1) An operator shall ensure that each member of his flight crew holds valid licences with appropriate ratings.

(2) A pilot in command shall not operate an aircraft in air commercial transportation operations unless he ensures that

(a) the licence of each flight crew member is valid; and

(b) contains the proper ratings.

(3) No pilot shall operate an aircraft in commercial air transport operations or aerial work unless he meets the requirements of the Act or regulations made thereunder for the specific operation and type of aircraft used.

Licence requirements for flight crew.

36. (1) No person shall act as pilot in command or in any other capacity as a required flight crew member of

(a) a Barbadian aircraft, unless he carries in his personal possession the appropriate and valid licence for that flight crew position for that type of aircraft;

(b) a foreign aircraft, unless he carries in his personal possession the appropriate and valid licence for that type of aircraft which shall include a current medical certificate issued by the State which issued the licence.

(2) The flight crew of an aircraft shall include at least one member who holds a valid licence issued or rendered valid by the Director, authorising operation of the type of radio transmitting equipment to be used.

Limitation on use of services for commercial air transport operations. S.I. 2007 No. 172.

37. No person shall act as a required flight crew member, nor shall any national air operator require a person to act as a required member in commercial air transport operations, where he does not meet the requirements of the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007* and has successfully completed the full training programme under these Regulations of the national air operator.

Rating required for instrument flight rules operations.

38. No person shall act as pilot in command of an aircraft under instrument flight rules or in weather conditions less than the minimum prescribed for visual flight rules flight unless

(a) in the case of an aeroplane, the pilot holds an instrument rating or an airline transport pilot licence with an appropriate aeroplane category, class, and type rating for the aeroplane being flown;

(b) in the case of a helicopter, the pilot holds a helicopter instrument rating or an airline transport pilot licence for helicopters not limited to visual flight rules operations.

39. (1) Except as provided in paragraph (2), a person shall not act as a flight crew member of an aircraft in a Category II or III operation under Part VIII unless

Special authorisation required for Category II or III operations.

S.I. 2007 No. 172.

(a) in the case of a pilot in command, he holds a current Category II or III pilot authorisation issued in accordance with the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007* for that type of aircraft; and

(b) in the case of a co-pilot, he is authorised under that Part to act as co-pilot in that aircraft in Category II or III operations.

(2) An authorisation is not required for individual pilots of an air operator who has Operations Specifications approving Category II or III operations.

40. (1) A pilot shall provide the Director with evidence that he possesses the aeronautical training and experience to meet the requirements for a licence or rating, or recency of experience as recorded in his logbook.

Pilot logbooks.

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

41. (1) No person shall act as pilot in command of an aircraft carrying passengers, nor of an aircraft certified for more than one required flight crew member unless within the preceding 90 days that pilot has

Recency requirements for a pilot in command.

(a) made 3 take-offs and landings as the sole manipulator of the flight controls in an aircraft of the same category and class and where a type rating is required, of the same type; or

(b) for a tailwheel aeroplane, made 3 take-offs and landings in a tailwheel aeroplane with each landing to a full stop.

(2) A pilot who has not met the recency of experience for take-offs and landings referred to in paragraph (1), shall satisfactorily complete a re-qualification training programme acceptable to the Director.

(3) The requirements of paragraphs (1) and (2), may be satisfied in a flight simulator.

(4) The 90 day period prescribed in paragraph (1), may be extended up to a maximum of 120 days where the pilot meets the requirements of paragraph (1), on a line flight under the supervision of a type rating instructor or flight test examiner.

(5) Where a period beyond the 120 days extension under paragraph (4), is required, the recency requirement shall be satisfied by a training flight or use of a flight simulator.

Requirements for flying under instrument flight rules or instrument meteorological conditions.

42. (1) No person shall act as pilot in command in an aircraft under instrument flight rules, nor in instrument meteorological conditions, unless he has, within the past 12 months

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

(b) completed at least 6 instrument approaches.

(2) A pilot who has completed an instrument proficiency check with a flight test examiner, retains recency for instrument flight rules operations for 12 months following such check.

Recency take-off and landing requirements for co-pilot.

43. (1) No pilot shall act as co-pilot at the flight controls of an aircraft during take-off and landing unless, within the preceding 90 days, such pilot has

(a) made 3 take-offs and landings as the pilot in command or co-pilot in an aircraft of the same category and class and where a type rating is required of the same type; and

(b) for a tailwheel aircraft, made the 3 take-offs and landings as the pilot in command or co-pilot in a tailwheel aircraft with each landing to a full stop.

(2) A pilot who has not met the recency requirements for takeoffs and landings prescribed by paragraph (1), shall satisfactorily complete a re-qualification training programme acceptable to the Director.

(3) The requirements of paragraphs (1) and (2), may be satisfied in a flight simulator.

(4) The 90 day period prescribed in paragraph (1), may be extended up to a maximum of 120 days where the pilot meets the requirements of paragraph (1), on a line flight under the supervision of a type rating instructor or flight test examiner.

(5) Where a period beyond the 120 days extension under paragraph (4), is required, the recency requirement shall be satisfied by a training flight or use of a flight simulator.

Required proficiency for general aviation pilots.

44. (1) No person shall act as pilot in command of an aircraft type certified for more than one pilot unless, since the beginning of the preceding 12 months, he has passed with a flight test examiner, a proficiency check in an aircraft requiring more than one pilot.

(2) No person shall act as pilot in command of an aircraft type certified for more than one pilot unless, since the beginning of the preceding 24 months, he has passed a proficiency check in the aircraft type to be operated.

(3) No person shall act as pilot in command of an aircraft type certified for a single pilot unless, since the beginning of the preceding 24 months, he has passed a proficiency check with a flight test examiner.

(4) A flight test examiner conducting proficiency checks under this Regulation shall ensure that each proficiency check duplicates the manoeuvres of the type rating skill test.

(5) No person shall act as co-pilot of an aircraft type certified for more than one pilot unless, since the beginning of the preceding 12 months, he has

(a) become familiar with the aircraft systems, performance, normal and emergency procedures; and

(b) logged 3 take-off and landings as the sole manipulator of the controls.

(6) This Regulation shall not apply to pilots engaged in commercial air transport operations.

Pilot privileges and limitations.

45. A pilot may conduct operations only within the privileges and limitations of his licence.

PART V

Crew Member Duties and Responsibilities

Crew responsibilities.

46. (1) A crew member shall be responsible for the proper execution of his duties that

(a) are related to the safety of the aircraft and its occupants; and

(b) are specified in the instructions and procedures laid down in the operations manual.

(2) A crew member shall

(a) report to the pilot in command any fault, failure, malfunction or defect which he believes may affect the airworthiness or safe operation of an aircraft including emergency system;

(b) report to the pilot in command any occurrence that endangered, or may endanger the safety of operation; and

(c) make use of the occurrence reporting scheme of the operator in accordance with these Regulations and in all such cases a copy of the report shall be communicated to the pilot in command concerned.

(3) Nothing in paragraph (2), shall require a crew member to report an occurrence which has already been reported by another crew member.

(4) No crew member shall perform duties on an aircraft

(a) while under the influence of any drug that may affect his faculties in a manner contrary to safety;

(b) until a reasonable time period has elapsed after deep-water diving;

(c) following a blood donation except when a reasonable time period has elapsed;

(d) where he is in any doubt of being able to accomplish his assigned duties; or

(e) where he knows or suspects that he is suffering from fatigue, or feels unfit to the extent that the flight may be endangered.

(5) No crew member shall

(a) consume alcohol less than 8 hours prior to the specified reporting time for flight duty or the commencement of reserve or standby duty;

(b) commence a flight duty period with a blood alcohol level in excess of 0.04 per cent by weight in the period;

(c) consume alcohol during the flight duty period or whilst on reserve or standby duty.

(6) A pilot in command shall

(a) be responsible for the safe operations of the aircraft and the safety of its occupants during flight time;

(b) decide whether or not to accept an aircraft with unserviceable equipment permitted by the configuration deviation list or minimum equipment list;

(c) ensure that the pre-flight inspection has been carried out;

(d) have authority to give all commands he deems necessary for the purpose of securing the safety of the aircraft and of persons or property carried therein;

(e) have authority to require any person to disembark or have removed, who in his opinion, may represent a potential hazard to the safety of the aircraft or its occupants;

(f) have authority to require any part of cargo on an aircraft be removed, which in his opinion, may represent a potential hazard to the safety of the aircraft or its occupants;

(g) not permit any person to be carried in the aircraft who appears to be under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants is likely to be endangered;

(h) have the right to refuse transportation of inadmissible passengers, deportees or persons in custody if their carriage poses any risk to the safety of the aircraft or its occupants;

(i) detain any person or cargo for any period he considers reasonably necessary to ensure compliance with the Act or Regulations made thereunder;

(j) ensure that all passengers are briefed on the location of emergency exits and the location and use of relevant safety and emergency equipment;

(k) ensure that all operational procedures and checklists are complied with in accordance with the operations manual;

(l) not allow any crew member to perform any activity during take-off, initial climb, final approach and landing except those duties required for the safe operation of the aircraft; and

(m) not allow

(i) a flight data recorder to be disabled, switched off or erased during flight;

(ii) recorded data to be erased after flight in the event of an accident or an incident subject to mandatory reporting;

(iii) a cockpit voice recorder to be disabled or switched off during flight unless he believes that the recorded data, which otherwise would be erased automatically, should be preserved for incident or accident investigation; and

(iv) recorded data to be manually erased during or after flight in the event of an accident or incident, subject to mandatory reporting.

(7) The pilot in command or the pilot to whom conduct of the flight has been delegated shall, in an emergency situation that requires immediate decision and actions, take any action he considers necessary under the circumstances and in such cases he may deviate from rules, operational procedures and methods in the interest of safety.

Powers of the pilot in command.

47. An operator shall take all necessary measures to ensure that all persons carried in the aircraft, obey all reasonable commands given by the pilot in command for the purpose of securing the safety of the aircraft and of persons or property carried therein.

48. (1) Subject to paragraph (2), a pilot in command shall comply with the relevant laws, regulations and procedures of the States in which the aircraft is operated. Compliance with local regulations.

(2) Where an emergency situation exists, which endangers the safety of an aircraft or persons on board an aircraft and necessitates the taking of action which involves a violation of the requirements under paragraph (1), the pilot in command shall

(a) notify the appropriate Civil Aviation Authority without delay; and

(b) submit a report of the circumstances, where required by the State in which the incident occurred.

(3) A copy of the report referred to in paragraph (2)*(b)*, shall be submitted by the pilot in command to the Director within 10 days of the violation in the form prescribed.

49. No person shall operate an aircraft in a negligent or reckless manner so as to endanger life or property. Prohibition on the negligent or reckless operations of aircraft.

50. (1) No person shall act as pilot in command or in any other capacity as a required flight crew when he is aware of any decrease in his medical fitness which might render him unable to safely exercise the privileges of his licence. Fitness of flight crew.

(2) The pilot in command shall be responsible for ensuring that a flight is not

(a) commenced where any flight crew member is incapacitated from performing duties for any cause such as injury, sickness, fatigue, the effects of alcohol or drugs; or

(b) continued beyond the nearest suitable airport where the capacity of the flight crew to perform functions is significantly reduced by impairment of faculties due to fatigue, sickness or lack of oxygen.

Crew members use of seat belts and shoulder harnesses.

51. (1) A crew member shall have his seat belt fastened during take-off and landing and all other times when seated at his station.

(2) A member of the flight crew occupying a pilot seat shall keep the safety harness fastened during take-off and landing phases.

(3) Crew members other than those specified in paragraph (1), occupying a station equipped with a shoulder harness shall fasten that harness during take-off and landing, except that the shoulder harness may be unfastened where those crew members cannot perform the required duties with the shoulder harness fastened.

(4) An occupant of a seat equipped with a combined safety belt and shoulder harness shall have the combined safety belt and shoulder harness properly secured about himself, during take-off and landing and be able to properly perform assigned duties.

(5) At an unoccupied seat, the safety belt and shoulder harness, where installed, shall be secured so as not to interfere with a crew member in the performance of his duties or with the rapid egress of persons in an emergency.

Requirements of flight crew at duty stations.

52. (1) A required flight crew member shall remain at his assigned duty station during take-off and landing and critical phases of flight.

(2) A flight crew member shall remain at his station during all phases of flight unless

(a) absence is necessary for the performance of his duties in connection with the operation;

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

(c) the crew member is taking a rest period and a qualified relief crew member replaces him at the duty station.

(3) On all decks of an aircraft that are occupied by passengers, required cabin crew members shall be seated at their assigned stations during the take-off and landing and whenever deemed necessary by the pilot in command in the interest of safety.

Flight crew emergency duties.

53. An operator shall assign for each type of aircraft the necessary functions that flight crew are to perform in an emergency or in a situation requiring emergency evacuation.

Required crew equipment.

54. (1) A crew member involved in night operations shall have a flashlight at his station.

(2) A flight crew member shall have at his station an aircraft checklist containing at least the pre-take-off, after take-off, before landing and emergency procedures.

(3) A flight crew member shall have at his station, current and suitable charts to cover the route of the proposed flight and any route along which it is reasonable to expect that the flight may be diverted.

(4) A flight crew member assessed as fit to exercise the privileges of a licence subject to the use of suitable corrective lenses, shall have a spare set of the corrective lenses readily available when performing as a required crew member in commercial air transport operations.

Compliance with approved checklist procedures. S.I. 2007 No. 173.

55. A pilot in command shall ensure that the flight crew follows the approved checklist procedures under the *Civil Aviation (Air Operator Operating Certification and Administration) Regulations, 2007*, when operating the aircraft.

Search and rescue information on board aircraft.

56. For all international flights, a pilot in command shall have on board the aircraft essential information concerning the search and rescue services in the areas over which they intend to operate the aircraft.

Production of aircraft and flight documentation.

57. A pilot in command shall produce to an inspector from the office of the Director or of any other Civil Aviation Authority of a Contracting State the documentation required to be carried on board an aircraft when such inspector so requests.

58. A pilot in command shall ensure that approved procedures under *Civil Aviation (Air Operator Certification and Administration) Regulations, 2007* to prevent unauthorised persons from entering the flight crew compartment during flight are complied with at all times during passenger carrying commercial air transport operations.

Prevention of unauthorised persons in flight crew compartment. S.I. 2007 No. 173.

59. (1) No pilot in command shall admit any person to the cockpit of a Barbadian aircraft engaged in commercial air transport operations unless the person being admitted is

Admission to the cockpit in commercial air transport operations.

(a) an operating crew member;

(b) a representative of the Director responsible for certification, licencing or inspection, where this is required for the performance of his official duties;

(c) permitted by the instructions contained in the operations manual;

(d) a flight operations officer of a national air operator on line observation training; and

(e) an air traffic controller who is authorised by the Director to observe air traffic control procedures.

(2) The pilot in command shall ensure that

(a) in the interest of safety, admission to the cockpit does not cause distraction and interference with the operations of the flight; and

(b) a person who is carried on the cockpit is made familiar with the relevant safety procedures.

60. (1) Where, in performing the duties of conducting an inspection, an inspector presents his authorisation to the pilot in command, the pilot in command shall give the inspector free and uninterrupted access to the cockpit of the aircraft.

Admission of inspector to the cockpit.

(2) A national air operator shall make available for the use of the inspector, the observer seat most suitable to perform his duties as determined by the inspector.

Requirement for in-flight fuel management.

61. (1) An air operator shall establish a procedure to ensure that in-flight fuel checks and fuel management are carried out.

(2) A pilot in command shall ensure that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to an airport where a safe landing can be made, with final reserve fuel remaining.

(3) A pilot in command shall declare an emergency when the actual usable fuel on board is less than the final reserve fuel.

Duties of flight crew during critical phases of flight.

62. (1) A flight crew member shall not perform any duties during a critical phase of flight except those required for the safe operation of the aircraft.

(2) No pilot in command shall permit a flight crew member to engage in any activity during a critical phase of flight which could distract or interfere with the performance of his assigned duties.

(3) A flight crew member required to be on cockpit duty shall communicate through boom microphones below flight level 150.

Restriction on manipulation of the controls in commercial air transport operations.

63. (1) No pilot in command shall allow an unqualified person to manipulate the controls of an aircraft during commercial air transport operations.

(2) No pilot in command shall allow any person to manipulate the controls of an aircraft during commercial air transport operations nor shall any person manipulate the controls during flight unless that person

(a) is a qualified pilot, flight instructor or check airman of the national air operator operating that aircraft;

(b) is an authorised pilot safety representative of the Director; or

(c) has the permission of the pilot in command, is qualified in the aircraft, and is checking flight operations.

Simulated abnormal situations during commercial air transport operations.

64. No person shall cause or engage in simulated abnormal or emergency situations or the simulation of instrument meteorological conditions by artificial means during commercial air transport operations.

Completion of technical logbook for commercial air transport operations.

65. (1) The pilot in command shall ensure that all portions of the technical logbook are completed in indelible ink or indelible pencil at the appropriate points before, during and after flight operations.

(2) The pilot in command shall be responsible for the journey log and the general declaration.

Reporting mechanical irregularities.

66. An operator shall ensure that all known or suspected defects and mechanical irregularities occurring during flight time are entered in the technical log of the aircraft at the end of such flight time.

General reporting procedures for occurrences.

67. (1) An operator shall establish procedures for reporting occurrences taking into account the following responsibilities:

(a) a pilot in command or the operator of an aircraft shall submit a report to the Director of any occurrence that endangers or could endanger the safety of operation;

(b) a report referred to in paragraph *(a)*, by the pilot in command shall be despatched within 72 hours of the time when the incident was identified unless exceptional circumstances prevent this;

(c) a pilot in command shall ensure that all known or suspected technical defects and all occurrences whose technical limitations occurring while he was responsible for the flight are recorded in the aircraft technical log, and where the deficiency or exigency of technical limitations endangers or could endanger the safety of operation, the pilot in command shall in addition initiate the submission of a report to the Director in accordance with paragraph *(a)*.

(2) In the case of incidents reported in accordance with paragraph (1)

(a) arising from or relating to, any failure, malfunction defect in the aircraft, its equipment or any item of ground support equipment; or

(b) which causes or may cause adverse effects on continuing airworthiness of the aircraft,

the operator shall also inform the organisation responsible for the design or the supplier or, where applicable, the organisation responsible for continued airworthiness, at the same time as a report is submitted to the Director.

Reporting procedures for accidents and serious incidents.

68. An operator shall establish procedures for reporting accidents and serious incidents taking into account the following responsibilities and the circumstances:

(a) a pilot in command shall notify the operator of any accident or serious incident occurring while he was responsible for the flight, and when he is incapable of providing such notification, this task shall be undertaken by the next senior crew member as specified by the national air operator where such other member is able to do so;

(b) an operator shall ensure that the Civil Aviation Authority in the State of the operator, the nearest appropriate Civil Aviation Authority where not the Civil Aviation Authority in the State of the operator, and any other organisation required by the State of the operator to be informed, are notified by the quickest means available of any accident or serious incident and in the case of accidents only, at least before the aircraft is moved unless exceptional circumstances prevent this; and

(c) a pilot in command or the operator of an aircraft shall submit a report to the Civil Aviation Authority in the State of the operator within 72 hours of the time when the accident or serious incident occurred.

Reporting procedures for air traffic incidents.

69. Where an air traffic incident occurs, a pilot in command shall without delay notify

(a) the air traffic control facility concerned of the incident and of his intention to submit an air traffic incident report after the flight has ended whenever an aircraft in flight has been endangered by

(i) near collision with any other flying device;

(ii) faulty air traffic procedures or lack of compliance with applicable procedures by air traffic control or by the flight crew; and

(iii) failure of air traffic control facilities; and

(b) the Director, of the incident.

Procedures for reporting airborne collision avoidance system advisory.

70. A pilot in command shall

(a) immediately notify the air traffic control facility concerned whenever an aircraft in flight has manoeuvred in response to an airborne collision avoidance system resolution advisory;

(b) submit a report to the Director on any occurrence of an airborne collision avoidance system resolution advisory.

Procedures for reporting bird hazards and strikes.

71. (1) A pilot in command shall immediately inform the local traffic control facility whenever a potential bird hazard is observed.

(2) Where a pilot in command of an aircraft is aware that a bird strike has occurred and such bird strike has resulted in significant damage or the loss or malfunction of any essential service of the aircraft, he shall submit a written bird strike report to the Director, upon landing.

(3) Where evidence of a bird strike is discovered on an aircraft when the pilot in command is not available, the operator shall be responsible for submitting the report.

Procedures for reporting in-flight emergency.

72. (1) Where an in-flight emergency occurs, the pilot in command shall inform the appropriate air traffic facility

(a) of such an occurrence; and

(b) where the situation permits, any dangerous goods on board the aircraft.

(2) Where an aircraft referred to in paragraph (1) has landed, the pilot in command shall, where the occurrence has been associated with and was related to the transport of dangerous goods, comply also with the reporting requirements specified in regulation 25.

Reporting acts of unlawful interference.

73. Where there has been an act of unlawful interference on board an aircraft, the pilot in command or, in his absence, the operator, shall submit a report as soon as practicable to the Civil Aviation Authority of the State where the incident occurred and to the Director.

Procedures for reporting potentially hazardous conditions.

74. A pilot in command shall notify the appropriate air traffic control facility as soon as practicable whenever a potentially hazardous condition is encountered during flight such as an irregularity in a ground or navigational facility, a meteorological phenomenon or a volcanic ash cloud.

Operation of cockpit voice and flight data recorder.

75. (1) A pilot in command shall ensure that whenever an aircraft has flight recorders installed, those recorders are operated continuously

(a) in the case of the flight data recorder, from the instant the aircraft begins its take-off roll until it has completed the landing roll; and

(b) in the case of the cockpit voice recorder, from the instant of the initiation of the pre-start checklist until the end of the aircraft shutdown checklist.

(2) No pilot in command, in order to preserve the data for an accident or incident investigation by the Director, shall unless necessary permit a flight data recorder or cockpit voice recorder to be disabled, switched off or erased during flight.

(3) In the event of an accident or incident, a pilot in command shall act to preserve the recorded data for subsequent submission to the Director as may be requested to conduct an investigation.

Supply and use of oxygen.

76. (1) A pilot in command shall ensure that breathing oxygen is provided on flights at such altitudes where a lack of oxygen may result in impairment of the faculties of crew members.

(2) The minimum supply of oxygen on board the aircraft shall not be less than that prescribed by *Civil Aviation (Instruments and Equipment) Regulations, 2007*. S.I. 2007 No. 178.

(3) A pilot in command shall ensure that all flight crew members when performing duties essential to the safe operation of an aircraft in flight, use breathing oxygen continuously where the cabin altitudes exceeds 10 000 feet for a period in excess of 30 minutes.

(4) One pilot at the controls of a pressurised aircraft in flight shall have available at his pilot station, a quick-donning oxygen mask with oxygen readily available on demand

(a) for general aviation operations, at flight levels above 350, where there is no other pilot at his duty station; and

(b) for commercial air transport operations, at flight levels above 250, if there is no other pilot at his duty station.

Restrictions on use of portable electronic devices.

77. No pilot in command or a senior cabin crew member shall permit any person to use, nor shall any person use a portable electronic device on board an aircraft that may adversely affect the performance of the aircraft systems and equipment unless

(a) for instrument flight rules operations other than commercial air transport, the pilot or senior crew member allows the use of such device; or

(b) for commercial air transport operations, the national air operator makes a determination of acceptable devices and publishes that information in the operations manual for use by the crew members; and

(c) the pilot in command or senior cabin crew member informs passengers of those portable electronic devices that may be used on the aircraft.

PART VI

Flight Planning and Supervision

Submission of flight plan.

78. (1) Information in respect of an intended flight or portion of a flight, to be provided to the appropriate air traffic control facilities, shall be in the form of an air traffic control flight plan (hereinafter referred to as a "flight plan").

(2) A flight plan referred to in paragraph (1), shall be filed for all visual flight rules and instrument flight rule flights.

(3) A pilot in command shall submit a flight plan before departure or during flight, to the appropriate air traffic control facility, unless arrangements have been made for submission of a repetitive flight plan.

(4) Unless otherwise prescribed by the appropriate air traffic control facility, a pilot shall submit a flight plan to the appropriate air traffic control facility

(a) at least 60 minutes before departure of the aircraft; or

(b) where submitted during flight, at a time which will ensure its receipt by the appropriate air traffic control facility at least 10 minutes before the aircraft is estimated to reach

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

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

79. No person shall take-off an aircraft in commercial air transport operations where a flight plan has not been filed, except as authorised by the Director.

Air traffic control flight plan for commercial air transport operations.

80. (1) A person filing an instrument flight rules flight plan or visual flight rules flight plan shall provide the following information to air traffic control facility prior to departure of that aircraft

Contents of a flight plan.

(a) aircraft identification;

(b) flight rules and type of flight;

(c) number and type of aircraft and wake turbulence category;

(d) equipment;

(e) departure airport and alternate, where required;

(f) estimated off-block time;

(g) cruising speed;

(h) cruising level;

(i) route to be followed;

(j) destination airport and total estimated elapsed time;

(k) alternate airport;

(l) fuel endurance;

(m) total number of persons on board;

(n) emergency and survival equipment;

(o) name of pilot in command; and

(p) any other information as may be prescribed by the Director.

(2) A flight plan referred to in paragraph (1), shall contain information on the items set out in paragraph (1)*(a)* through *(k)* regarding the whole route or the portion thereof for which the flight plan is submitted.

Requirements for planned re-clearance.

81. Where during flight planning a flight operation officer or an equivalently qualified person determines that fuel endurance of the aircraft may permit the pilot in command to change the destination filed to one of greater distance during flight while still complying with the minimum fuel planning requirements, he shall where the pilot in command agrees, notify the appropriate air traffic control facility of this possibility when the flight plan is submitted.

Procedures where there are changes to a flight plan.

82. (1) When a flight plan is submitted for an instrument flight rules flight or a visual flight rules flight operated as a controlled flight, and a change occurs to such flight plan in respect of

(a) instrument flight rules flight to visual flight rules flight; or

(b) visual flight rules flight to instrument flight rules flight,

the pilot shall report such change as soon as practicable to the appropriate air traffic control facility.

(2) For visual flight rules flight other than that operated as a controlled flight, the pilot in command shall report significant changes to a flight plan as soon as practicable to the appropriate air traffic control facility.

(3) Operational instructions involving a change to the filed flight plan, shall when practicable, be co-ordinated with the appropriate air traffic control facility before transmission to the aircraft.

(4) Where information is submitted prior to departure regarding fuel endurance or total number of persons carried on board, and this information is incorrect at time of departure, such circumstance constitutes a significant change referred to in paragraph (2) and shall be reported to the air traffic control facility.

Procedures for closing a flight plan.

83. (1) A pilot in command shall make a report of arrival (hereinafter referred to as an "arrival report") either in person or by radio to the appropriate air traffic control facility at the earliest opportunity upon landing at the destination airport, unless the air traffic control facility automatically closes a flight plan.

(2) Where a flight plan has been submitted for a portion of a flight, but not the arrival at destination, the pilot shall close that flight plan en route with the appropriate air traffic control facility.

(3) Where an air traffic control facility referred to in paragraph (2) does not exist at the arrival airport, the pilot shall contact the nearest air traffic control facility to close the flight plan as soon as practicable after landing and by the quickest means available.

(4) When communication facilities at the arrival airport are known to be inadequate and alternate arrangements for the handling of arrival reports on the ground are not available prior to landing the aircraft, they shall transmit to the appropriate air traffic control facility, a message with all the arrival details which would normally be contained in an arrival report.

(5) An arrival report under this Regulation shall include the following information:

(a) aircraft identification;

(b) departure airport;

(c) destination airport, only in the case of a diversionary landing;

(d) arrival airport; and

(e) time of arrival.

(6) In this Regulation "closing a flight plan" means an indication by the pilot in command of the end or intended end of a flight within an air traffic control facility.

Aircraft airworthiness and safety precautions.

84. (1) No pilot in command shall operate an aircraft in flight unless he is satisfied that

(a) the aircraft is airworthy, duly registered and that the appropriate certificates are aboard the aircraft;

(b) the instruments and equipment installed in the aircraft are appropriate, taking into account the expected flight conditions; and

(c) any necessary maintenance has been performed and a certificate of the release to service, has been issued in respect of the aircraft.

(2) For commercial air transport operations, a pilot in command shall certify by signing the aircraft technical log that he is satisfied that the requirements of paragraph (1), have been met for a particular flight.

(3) A pilot in command shall certify by signing the load sheet and operational flight plan that he is satisfied that

(a) the mass and centre of gravity of the aircraft are such that the flight can be conducted safely, taking into account the flight conditions expected;

(b) any load carried is properly distributed and safely secured in accordance with the aircraft loading manual;

(c) a check has been completed indicating that the operating limitations of Part VII can be complied with for the flight to be undertaken.

Adequacy of operating facilities.

85. (1) No person shall commence a flight unless it has been determined by every reasonable means available that the ground or water areas and airport facilities including communication facilities and navigational aids are available and directly required for such flight and for the safe operation of the aircraft, and are adequate and continuously available irrespective of weather conditions or during their published hours of operations as applicable.

(2) In this Regulation "every reasonable means" means the use at the point of departure of information available to the pilot in command either through official information published by the aeronautical information services or readily obtainable from other sources.

Meteorological information.

86. (1) Before commencing a flight, a pilot in command shall be familiar with all available meteorological information appropriate to the intended flight.

(2) A pilot in command shall include, during preparation for flight

(a) a study of current weather reports and forecasts; and

(b) the planning of an alternative course of action to provide for the possibility that the flight cannot be completed as planned, because of weather conditions.

Weather limitations for visual flight rules flights.

87. No person shall commence a flight to be conducted in accordance with visual flight rules 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 visual flight rules, will at the appropriate time, allow visual flight rules operations.

Instrument flight rules, destination airport requirements.

88. (1) No person shall for instrument flight rules flight planning purposes, commence an instrument flight rules flight unless approach minima are prescribed and the information indicates that the weather conditions at the airport of intended landing and where required, at least one suitable alternate at the estimated time of arrival, will be at or above the minimum

(a) ceiling and visibility values for the standard instrument approach procedure to be used; or

(b) operating altitude, where no instrument approach procedure is to be used, that would allow a visual flight rules descent to the airport.

(2) In accordance with paragraph (1), where instrument flight rules flight planning is required for commercial air transport, the weather at the

destination is not required to be at or above the approach minima to release and commence a flight where the designated alternate airport meets the instrument flight rules weather selection criteria.

Instrument flight rules, destination alternate requirements.

89. (1) A pilot in command shall, for a flight to be conducted in accordance with the instrument flight rules, ensure that at least one destination alternate airport is selected and specified in the operational flight plan referred to in regulation 103 and the air traffic control flight plans, unless

(a) the duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the estimated time of arrival at the airport of intended landing and for a reasonable period before and after such time, the approach and landing may be made under visual flight rules;

(b) the airport of intended landing is isolated and there is no suitable destination alternate airport; or

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

(2) The requirements set out in paragraph (1), shall be satisfied where

(a) there is a standard instrument approach procedure prescribed for the airport of intended landing by the appropriate authority; and

(b) available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival:

(i) a cloud base of at least 1 000 feet above the approach minimum associated with the instrument approach procedure; and

(ii) visibility of 4 kilometres more than the approach minimum associated with the procedure or 5.5 kilometres whichever is the greater.

(3) The ceiling and visibility requirements of paragraph (2)*(b)* may be reduced upon approval of the Director for

(a) helicopters; or

(b) commercial air transport operations where no suitable destination alternate exists.

Instrument flight rules, alternate airport selection criteria.

90. (1) No pilot in command shall designate an alternate airport in an instrument flight rules flight plan unless

(a) the current available forecast indicates that the meteorological conditions at that alternate airport at the estimated time of arrival will be at or above approach minima for such alternate airport; or

(b) specifically authorised by the Director.

(2) Unless otherwise specifically authorised by the Director, where approach minima under this Regulation are not published, and where there is no prohibition against using the airport as an instrument flight rules planning alternate, a pilot in command shall ensure that the meteorological conditions at that alternate at the estimated time of arrival will be at or above

(a) a ceiling of at least 600 feet and visibility of not less than 2 nautical miles for a precision approach procedure; or

(b) a ceiling of at least 800 feet and visibility of not less than 2 nautical miles for a non-precision approach procedure.

Off-shore alternates for helicopter operations.

91. (1) No person shall designate an off-shore alternate airport landing site for helicopter operations when it is possible to carry enough fuel to have an on-shore alternate landing site.

(2) A person selecting an off-shore alternate airport landing site for helicopter operations shall consider the following:

(a) calculating the point of no return;

(b) the use of off-shore alternate only after a point of no return;

(c) attaining one engine inoperative performance capability prior to arrival at the alternate;

(d) guaranteeing helideck availability;

(e) the weather information at the helideck shall be available from a source approved by the Director; and

(f) for instrument flight rule operations, an instrument approach procedure shall be prescribed and available.

Take-off alternate airports for commercial air transport operations.

92. (1) No person shall release an aircraft without a suitable take-off alternate airport specified in the flight release where it would not be possible to return to the airport of departure.

(2) A national air operator shall ensure that each take-off alternate airport referred to in paragraph (1), shall be located within

(a) one hour flight time at single-engine cruise speed for two-engine aircraft; or

(b) for three or four-engine aircraft, two hours flight time at one-engine inoperative cruise speed.

(3) A take-off alternate airport shall be selected and specified in the operational flight plan where the weather conditions at the airport of departure are at or below the applicable airport operating minima or it would not be possible to return to the airport of departure for other reasons.

(4) No operator shall select an alternate airport unless

(a) the appropriate weather reports, forecast or any combination thereof indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the airport, the weather condition will be at or above the applicable landing minima specified for that airport;

(b) the height of the ceiling is taken into account when the only approaches available are non-precision and circling approaches; and

(c) limitations related to one-engine inoperative operation are taken into account.

Maximum distance from an adequate airport for two-engine aeroplanes without an extended range operations approval.

93. (1) Unless specifically approved by the Director, no national air operator shall operate a large two-engine aeroplane over a route that contains a point from an adequate airport, further than the distance flown in 60 minutes at the one-engine-inoperative cruise speed determined in accordance with paragraph (2), with either

(a) a maximum approved passenger seating configuration greater than 19; or

(b) a maximum take-off mass greater than 45 360 kilogrammes.

(2) A national air operator shall determine a speed for the calculation of the maximum distance to an adequate airport for each two-engine aeroplane type or variant operated, not exceeding the maximum operating speed 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

(i) for turbine engine powered aeroplane at

(A) flight level 170; or

(B) 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) for a propeller driven aeroplane at

(A) flight level 80; or

(B) 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;

(c) maximum continuous thrust or power on the remaining operating engine;

(d) an aeroplane mass not less than that resulting from

(i) take-off at sea-level at maximum take-off mass until the time elapsed since take-off is equal to the applicable threshold prescribed in paragraph (1);

(ii) all engines climb to the optimum long range cruise altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in paragraph (1); and

(iii) all engines cruise at the long range cruise speed at the optimum long range cruise altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in paragraph (1).

(3) A national air operator 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 paragraph (2);

(b) the maximum distance from an adequate airport determined in accordance with paragraphs (1) and (2); and

(c) any other pertinent data required by the Director.

Extended range operations with two-engine aeroplane.

94. (1) No operator shall conduct operations beyond the threshold distance determined in accordance with regulation 93 unless so approved by the Director.

(2) An operator wishing to conduct operations beyond the threshold distance determined in accordance with regulation 93 shall apply to the Director for approval to do so.

(3) Where the Director is satisfied that

(a) the airworthiness certification of the aircraft type;

(b) the reliability of the propulsion system; and

(c) the maintenance procedures of the operator, operating practices, flight dispatch and crew training programmes,

meets the requirements of these Regulations he may approve the operation.

Requirements for en route alternate airports for extended range operations.

95. (1) Prior to conducting an extended range operations flight, an air operator shall ensure that a suitable extended range operations en route alternate is available, within either the approved diversion time or a diversion time based on the minimum equipment list serviceability status of the aircraft, whichever is shorter.

(2) A pilot in command shall ensure that the required en route alternates for extended range operations are selected and specified in the flight plan in accordance with the extended range operations diversion time approved by the Director.

(3) No person shall select an airport as an extended range operations en route alternate airport unless the appropriate weather reports, forecasts or any combination thereof, indicate that during a period commencing one hour before and ending one hour after the expected time of arrival at the airport, the weather conditions will be at or above the planning minima prescribed in the Aircraft Operations Standards.

Fuel, oil and oxygen planning and contingency factors.

96. (1) No person shall commence a flight unless the aircraft carries sufficient amounts of fuel, oil and oxygen including any reserves to be carried for contingencies needed to ensure the safe completion of the flight.

(2) In computing the amounts required in paragraph (1), a person shall ensure that additional fuel, oil and oxygen are carried to provide for the increased consumption that would result from any of the following contingencies:

(a) expected winds and other meteorological conditions;

(b) possible variations in air traffic control routings;

(c) anticipated traffic delays;

(d) for instrument flight rules flight, one instrument approach at the destination airport, including a missed approach;

(e) the procedures prescribed in the operations manual for loss of pressurization en route where applicable;

(f) loss of one power unit en route; and

(g) any other conditions that may delay landing of the aircraft or increase fuel and oil consumption.

(3) A person computing the required minimum fuel supply shall ensure that, for flights of more than 2 000 nautical miles, the minimum fuel supply calculation includes an additional amount of fuel equal to that necessary to fly 10 per cent of the total time for the flight from take-off to destination.

(4) No pilot in command shall commence a flight to an airport where a suitable alternate airport is not available due to the destination airport being isolated, without enough reserve fuel for two additional hours flight at normal cruise fuel consumption.

(5) The Director may grant specific approval for commercial air transport operations to isolated airports without regard to the fuel consumption requirement of paragraph (4).

(6) A flight plan may be amended in flight in order to re-plan the flight to another airport, provided that the requirements of this Regulation can be complied with from the point where the flight has been re-planned.

(7) Notwithstanding paragraphs (1) through (5) the Director may require, in addition to any other requirement herein, extra fuel to be carried on a particular route or flight operation in the interest of safety.

(8) The extra fuel referred to in paragraph (7) shall be included in the computation of the minimum fuel requirement for that route.

Fuel supply requirements for visual flight rules flight.

97. (1) No person shall commence a flight in an aeroplane under visual flight rules unless, considering the wind and forecast weather conditions, there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed

(a) for flights during the day, for at least 30 minutes thereafter; or

(b) for flights at night, for at least 45 minutes thereafter; and

(c) for international flights, for at least an additional 15 per cent of the total flight time calculated for cruise flight.

(2) No person shall commence a flight in a helicopter under visual flight rules unless, considering the wind and forecast weather conditions there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed

(a) for 20 minutes thereafter; or

(b) for international flights, for at least an additional 10 per cent of the total flight time calculated, plus a reserve for contingencies specified by the operator and approved by the Director.

Fuel supply requirement for instrument flight rules flight.

98. (1) No person shall commence a flight under instrument flight rules unless there is enough fuel supply, considering weather reports and forecasts, to fly

(a) to the first point of intended landing;

(b) from the airport to the planned alternate airport, where required; and

(c) thereafter at normal cruising speed

(i) in a propeller-driven aeroplane, for 45 minutes; and

(ii) in a rotorcraft, turbojet or turbofan aeroplane, for 30 minutes in a holding pattern at 1 500 feet above the airport, plus a reserve for contingencies specified by the operator and approved by the Director.

(2) For instrument flight rules flight to an isolated airport, the two hour minimum reserve specified in regulation 96(4) shall apply.

(3) Notwithstanding paragraph (2), regulation 96(5) shall not apply to commercial air transport operations unless specifically approved by the Director.

Require-ments for flight planning document distribution and retention for commercial air transport operations.

99. (1) For commercial air transport operations, a pilot in command shall complete and sign the following flight preparation documents prior to departure:

(a) an operational flight plan, which takes into consideration notices to airmen and weather pertinent to the flight planning decisions regarding minimum fuel supply, en route performance, destination, airport and alternate airports;

(b) a load manifest, which takes into consideration the distribution of the load, centre of gravity, take-off and landing weights and compliance with maximum operating weight limitations and performance analysis;

(c) an applicable technical log page, where

(i) mechanical irregularities were entered after previous flight;

(ii) maintenance or inspection functions were performed; or

(iii) fuel and oil uplift were recorded; and

(iv) a certificate of release to service was issued at the departure airport.

(2) No person shall take-off in an aircraft in commercial air transport unless all flight release documents, signed by the pilot in command, are retained and available at the point of departure.

(3) A pilot in command shall carry on the aircraft a copy of the documents specified in paragraph (1), to the destination airport.

(4) Completed flight preparation documents shall be kept by a national air operator in the manner set out in the *Civil Aviation (Air Operator Certification and Administration) Regulations, 2007*. S.I. 2007 No. 173.

(5) An operational flight plan shall be completed for every intended flight and shall be approved and signed by the pilot in command and signed by the flight operations officer.

(6) A copy of the operational flight plan referred to in paragraph (5), shall be filed at the designated retention location.

(7) Where the procedures referred to in paragraph (6), are not possible the flight plan shall be left with the airport authority or on record at the appropriate authority specified by the national air operator in his operations manual.

(8) Notwithstanding paragraph (6), the Director may approve a different retention location where all documents can be available for subsequent review.

(9) In this Regulation "retention location" means the operator or an agent designated by him.

Requirements for aircraft loading, mass and balance.

100. (1) No person shall operate an aircraft unless all loads carried are properly distributed and safely secured on the aircraft in accordance with the approved loading manual for such aircraft or the procedures of the manufacturer in the case of small aeroplanes.

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

(3) A pilot in command may delegate his responsibility for the proper loading of an aircraft to suitably qualified persons provided by the national air operator, who shall be responsible for supervising such loading.

(4) Notwithstanding paragraph (3), a pilot in command shall ascertain that proper loading procedures are followed.

(5) For commercial air transport operations, a pilot in command shall not commence a flight unless he is satisfied that the loading and mass and balance calculations contained in the load manifest are accurate and comply with the aircraft limitations.

(6) A national air operator shall establish mass and balance documentation in the manner set out in the Aircraft Operations Standards, prior to the departure of each flight specifying the load and its distribution which shall enable the pilot in command to determine that the load and its distribution is such that the mass and balance limits of the aircraft are not exceeded.

(7) The person preparing the mass and balance documentation referred to in paragraph (6), shall be named in such documentation.

(8) The person supervising the loading of the aircraft shall confirm by signature that the load and its distribution are in accordance with the mass and balance documentation.

(9) The document shall be acceptable to the pilot in command and his acceptance shall be indicated by countersignature or equivalent.

(10) An operator shall specify procedures for last minute changes to the load.

(11) Subject to the approval of the Director, a national air operator may use documentation procedures other than those required by this Regulation.

Allowable weights on all load manifests.

101. A pilot in command shall ensure that the maximum allowable weight for a flight does not exceed the maximum allowable take-off weight

(a) for the specific runway and conditions existing at the time of take-off; and

(b) considering anticipated fuel and oil consumption that allows compliance with applicable en route performance, landing weight and landing distance limitations for destination and alternate airports.

Requirement for flight release for commercial air transport operations.

102. (1) No person shall commence a flight under a flight following system without specific authority from the person authorised by the air operator to exercise operational control over the flight.

(2) No person shall commence a passenger-carrying flight in commercial air transport operations for which there is a published schedule, unless a qualified person authorised by the air operator to perform operational control functions has issued a flight release for that specific operation or series of operations.

(3) The pilot in command and flight operations officer shall sign the flight release document.

Requirements for operational flight plan for commercial air transport operations.

103. (1) No national air operator shall permit a person to commence a flight unless his operational flight plan meets the requirements set out in the Aircraft Operations Standards and has been prepared in accordance with the procedures specified in the operations manual of the national air operator and signed by the pilot in command and the flight operations officer.

(2) A pilot in command shall sign the operational flight plan only when he and the flight operations officer exercising operational supervision have determined that the flight can be safely completed.

(3) The operational flight plan under this Regulation shall include the routing and fuel calculations with respect to the meteorological and other factors expected to complete the flight to the destination and all required alternates.

(4) A pilot in command signing an operational flight plan shall have access to the applicable flight planning information for fuel supply, alternate airports, weather reports, forecasts and notices to airmen for the routing and airports of operation.

(5) No person shall continue a flight from an intermediate airport without a new operational flight plan where the aircraft has been on the ground more than 6 hours.

(6) A pilot in command of an aircraft shall ensure that one copy of the operational flight plan is left at a point of departure, in accordance with the procedures specified in the company operations manual and that another copy is carried on board the aircraft until the aircraft reaches the final destination of the flight.

(7) A national air operator shall specify in its company operations manual

(a) the period for which the operational flight plan shall be kept;

(b) the method of recording the formal approval of the plan by the

(i) flight operations officer; and

(ii) pilot in command.

(8) A national air operator shall keep a copy of the operational flight plan, including any amendments to the plan, for not less than 90 days.

Requirement to keep records of emergency and survival equipment for commercial air transport operations.

104. (1) An air operator shall at all times have available for immediate communication to rescue centres, lists containing information on the emergency and survival equipment carried on board any of their aircrafts engaged in international air transportation.

(2) The information required in paragraph (1), shall include as applicable the number, colours and type of life rafts and pyrotechnics, details of emergency medical supplies and type and frequencies of the emergency portable radio equipment.

PART VII

Aircraft Operating and Performance Limitations

Applicability of this Part.

105. This Part prescribes the operating and performance limitations for all civil aircraft.

General requirements for aircraft operations.

106. (1) An operator shall operate an aircraft in accordance with a comprehensive and detailed code of aircraft performance prescribed by the Director in compliance with the applicable Regulations of this Part.

(2) An operator shall not operate an aircraft that

(a) exceeds its designed performance limitations for any operation, as established by the Director; or

(b) exceeds operating limitations contained in the Aircraft Flight Manual, or its equivalent.

(3) An aircraft shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.

(4) Only Performance Class I helicopters shall be permitted to operate from elevated heliports in congested areas.

(5) An unmanned free balloon shall be operated in such a manner as to minimize hazards to persons, property or other aircraft in accordance with conditions specified by the Director.

Aircraft performance calculations.

107. (1) An operator shall ensure that the aircraft performance data contained in the Aircraft Flight Manual, or other authorised source is used to determine compliance with the appropriate requirements of this Part.

(2) When applying performance data, a person performing calculations shall account for the aircraft configuration, environmental conditions and the operation of any system or systems which may have an adverse effect on aircraft performance.

General weight and obstruction clearance limitations.

108. (1) No operator shall take-off an aircraft without ensuring that the maximum allowable weight for flight does not exceed the maximum allowable take-off or landing weight or any applicable en route aircraft performance or landing distance limitations considering the

(a) condition of the take-off and landing areas to be used;

(b) gradient of runway to be used in respect of land planes;

(c) pressure altitude;

(d) ambient temperature;

(e) current and forecast winds; and

(f) any known conditions such as atmospheric and aircraft configuration, which may adversely affect aircraft performance.

(2) No operator shall take-off an aircraft, assuming normal engine operations, which due to its weight is unable to safely clear all obstacles during all phases of flight, including all points along intended en route path or any the planned diversions.

(3) An operator shall ensure that an aircraft is operated in compliance with its mass limitations and noise certificate limitations where applicable.

Applicability of regulations 110 to 118.

109. Regulations 110 to 118 prescribe aircraft performance and operating limitations for aircraft used in commercial air transport operations.

General requirements for aircraft performance in commercial air transport.

110. Where full compliance with the requirements of regulations 111 to 118 cannot be shown due to specific design characteristics such as seaplanes, airships, or supersonic aircraft, the operator shall apply approved performance standards that ensure a level of safety not less restrictive than those of relevant requirements of these Regulations.

Prohibitions on the use of single-engine aircraft.

111. (1) No operator shall operate a single-engine aircraft used for revenue passenger carrying operations unless such aircraft is continually operated in daylight, under visual flight rules.

(2) No operator shall operate a multi-engine aircraft used for revenue passengers carrying operations that is unable to comply with any of the performance limitations of regulations 114 through 118 unless that aircraft is continually operated

(a) in daylight;

(b) under visual flight rules; and

(c) at a weight that will allow it to climb, with the critical engine inoperative, at least 50 feet a minute when operating at the minimum en route altitude of the intended route or any planned diversion, or at 5 000 feet above mean sea level, whichever is higher.

(3) A multi-engine aircraft that is unable to comply with paragraph (2)*(c)*, is for the purpose of these Regulations, considered to be a single-engine aircraft and shall comply with the requirements of paragraph (4).

(4) No person shall operate a single-engine aircraft in conditions of weather and light and over such routes and diversions there from, that permit a safe forced landing to be executed in the event of engine failure.

Required mass limitations for aeroplanes.

112. (1) The mass of an aircraft at the start of take-off shall not exceed the mass at which take-off limitations are complied with, nor the mass at which en route engine inoperative and landing limitations are complied with, allowing for expected reductions in mass as the flight proceeds and for any applicable jettisoning of fuel.

(2) The mass of an aircraft at the start of take-off shall not exceed the maximum take-off mass specified in the flight manual for the pressure-altitude appropriate to the elevation of the airport, and, where used as a parameter to determine the maximum take-off mass, any other local atmospheric condition.

(3) The estimated mass of an aircraft for the expected time of landing at the airport of intended landing and at any alternate airport shall not exceed the maximum landing mass specified in the flight manual for the pressure-altitude appropriate to the elevation of the airport, and, where used as a parameter to determine the maximum landing mass, any other local atmospheric condition.

(4) The mass of an aircraft at the start of take-off and the estimated mass for the expected time of landing at the airport of intended landing and at any alternate airport shall not exceed the relevant maximum mass at which compliance was demonstrated with the applicable noise certification standards, unless otherwise authorised by the relevant authority in respect of that airport.

Aircraft performance calculations.

113. (1) No national air operator shall take-off in an aircraft used in commercial air transport without ensuring that the applicable operating and performance limitations required for this Regulation can be accurately computed based on the Aircraft Flight Manual, or other data source approved by the Director.

(2) An air operator calculating performance and operating limitations for an aircraft used in commercial air transport shall ensure that performance

data used to determine compliance with these Regulations can, during any phase of flight, accurately account for

(a) any reasonably expected adverse operating conditions that may affect aircraft performance;

(b) one engine failure for aircraft having two engines, where applicable; and

(c) two engine failure for aircraft having three or more engines, where applicable.

(3) When calculating the performance and limitation requirements of regulations 114 to 118, a person performing the calculation shall, for all engines operating and for inoperative engines, accurately account

(a) in all phases of flight for

(i) the effect of fuel and oil consumption on aircraft weight;

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

(iii) the effect of fuel jettisoning on aircraft weight and fuel reserves, where applicable and approved;

(iv) the effect of any ice protection system, where weather conditions require its use;

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

(vi) flight paths and minimum altitudes required to remain clear of obstacles; and

(b) during take-off and landing for

(i) the condition of the take-off runway or area to be used, including any contamination such as water, slush, snow and ice;

(ii) the gradient of runway to be used;

(iii) the runway length including clearways and stopways, where applicable;

(iv) pressure altitude at take-off and landing sites;

(v) current ambient temperature and wind at take-off;

(vi) forecast ambient temperatures and winds at each destination and planned alternate landing site;

(vii) the ground handling characteristics, such as braking action, of the type of aircraft; and

(viii) landing aid and terrain that may affect the take-off path, landing path, and landing roll.

(4) Obstacle data shall be provided by the air operator, for the development of procedures and calculations to ensure compliance with take-off and obstacle clearance limitations.

(5) An air operator shall take account of charting accuracy when complying with these Regulations.

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

(7) In performing aircraft performance calculation under this Regulation an air operator may correct take-off data based on still air by taking into account not more than 50 per cent of any reported headwind component and not less than 150 per cent of any reported tailwind component.

Commercial air transport operations take-off limitations.

114. (1) An air operator shall take account of charting accuracy when assessing compliance with this Regulation.

(2) An air operator shall ensure that an aeroplane shall be able, in the event of a critical power-unit failing at any point in the take-off, either to discontinue the take-off and stop within the accelerate-stop distance available or to continue the take-off and clear all obstacles along the flight path by an adequate margin until the aircraft is in a position to comply with the en route one engine inoperative limitations.

(3) A national air operator shall ensure that an aeroplane is not allowed to take-off unless the following requirements are met when determining the maximum permitted take-off mass:

(a) the take-off run shall not be greater than the length of the runway;

(b) where the critical engine fails at any time after the aeroplane reaches V_1, to continue the take-off flight path and clear all obstacles either

(i) by a height of at least 35 feet vertically for turbine engine powered aeroplanes or 50 feet for reciprocating engine powered aeroplanes; and

(ii) by at least 60 metres horizontally within the airport boundaries and by at least 90 metres horizontally after passing the boundaries, without banking more than 15 degrees at any point on the take-off flight path;

(c) for a turbine engine powered aeroplane

(i) the take-off distance shall not exceed the length of the runway plus the length of any clearway, except that the length of any clearway included in the calculation shall not be greater than half the length of the runway; and

(ii) the accelerate-stop distance shall not exceed the length of the runway, plus the length of any stopway, at any time during take-off until reaching V_1;

(d) the accelerate-stop distance shall not exceed the length of the runway at any time during take-off until reaching V_1 for reciprocating engine powered aeroplane.

(4) In determining the length of the runway available for an aircraft, account shall be taken of the loss, where any, of runway length due to alignment of the aircraft prior to take-off.

(5) An air operator shall ensure that a Performance Class I helicopter is able, in the event of critical engine failure

(a) at or before the take-off decision point, to discontinue the take-off and stop within the rejected take-off area; or

(b) after the take-off decision point, to continue the take-off and then climb, clearing all obstacles along the flight path, until a suitable landing site is found.

(6) An air operator shall ensure that a Performance Class II helicopter is able, in the event of critical engine failure

(a) before reaching a defined point after take-off, to safely execute a forced landing within the rejected take-off area; or

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

En route limitations with all engines operating.

115. No national air operator shall take-off in a reciprocating engine powered aeroplane used in commercial air transport operations at a weight that does not allow a rate of climb of at least 6.9 V_{so}, with all engines operating, at an altitude of at least 1 000 feet above all terrain and obstructions within 10 nautical miles of each side of the intended track.

En route limitations where one engine is inoperative.

116. (1) No national air operator shall take-off in an aeroplane used in commercial air transport operations having two engines unless such aeroplane can, in the event of a power failure at the most critical point along the route or planned diversion there from, continue the flight to a suitable airport where a landing can be made within the landing limitations and without flying below the minimum flight altitude at any point, while allowing

(a) for a reciprocating engine powered aeroplane

(i) at least a rate of climb of 0.079-(0.106/number of engines installed) V_{so} (when V_{so} is expressed in knots) at an altitude of per 1 000 feet above all terrain and obstructions within 5 nautical miles, on each side of the intended track; and

(ii) a positive slope at an altitude of at least 1 500 feet above the airport where the aircraft is assumed to land;

(b) for a turbine engine powered transport category aeroplane

(i) a positive slope at an altitude of at least 1 000 feet above all terrain and obstructions within 9.3 kilometres, on each side of the intended track;

(ii) net flight path from cruising altitude to the intended landing airport that allows at least 2 000 feet clearance above all terrain and obstructions within 5 nautical miles, on each side of the intended track; and

(iii) a positive slope at an altitude of at least 1 500 feet above the airport where the aircraft is assumed to land.

(2) The climb rate specified in paragraph (1)*(a)*(i) may be amended to 0.026 V_{so}^{2} for large transport category aircraft issued a type certificate prior to the year 1953.

(3) The 5 nautical miles clearance margin stated in paragraph (1)*(a)*, shall be increased to 10 nautical miles where navigational accuracy does not meet the 95 per cent containment level.

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

En route limitations where two engines of an aeroplane are inoperative.

117. (1) No national air operator shall take-off in an aeroplane used in commercial air transport operations having three or more engines at such a weight where there is no suitable landing airport within 90 minutes at any point along the intended route with all engines operating at cruising power, unless that aircraft can, in the event of simultaneous power failure of two critical engines at the most critical point along that route, continue to a suitable landing airport while allowing

(a) for a turbine engine powered aeroplane

(i) a net flight path considering ambient temperatures anticipated along the track clearing vertically, by at least 2 000 feet, all terrain and obstructions within 5 nautical miles on each side of the intended track;

(ii) a positive slope at 1 500 feet above the airport of intended landing; and

(iii) enough fuel to continue to the airport of intended landing, to arrive at an altitude of at least 1 500 feet directly over the airport and thereafter to fly for 15 minutes at cruise power;

(b) for a reciprocating engine powered aeroplane

(i) a rate of climb at 0.013 V_{so}^2 feet per minute, at an altitude of 1 000 feet above the highest ground or obstruction within 10 nautical miles on each side of the intended track, or at an altitude of 5 000 feet, which ever is higher; and

(ii) enough fuel to continue to the airport of intended landing and to arrive at an altitude of at least 300 m directly over that airport.

(2) A national air operator shall ensure that in computing the fuel required to continue to the airport of intended landing under paragraph (1)*(a)* the consumption of fuel and oil after engine failure is the same as the consumption that is allowed for in the net flight path data in the Aircraft Flight Manual.

(3) Where the two engines of the reciprocating aeroplane are predicted to fail at an altitude above the prescribed minimum altitude, compliance with the prescribed rate of climb need not be shown during the descent from the cruising altitude to the prescribed minimum altitude, where those requirements can be met once the prescribed minimum altitude is reached, and assuming descent to be along a net flight path and the rate of descent to be 0.013 V_{so}^2 greater than the rate in the approved performance data.

(4) Where the jettisoning of fuel is authorised or planned, the weight of the aeroplane at the point where the two engines fail is considered to be not less than that which would include enough fuel to proceed to an airport and to arrive at an altitude of at least 1 000 feet directly over that airport.

(5) No national air operator shall take-off in a Performance Class I helicopter or Performance Class II helicopter used in commercial air transport operations having three or more engines, unless that helicopter can, in the event of two critical engines failing simultaneously at any point in the en route phase of flight, continue the flight to a suitable landing site.

118. (1) Before commencing an approach to land, a pilot in command shall satisfy himself that, according to the information available to him, the weather at the airport and the condition of the runway intended to be used, do not prevent a safe approach, landing or missed approach, having regard to the aircraft performance information contained in the operations manual. Aircraft landing limitations.

(2) No national air operator shall take-off in an aeroplane used in commercial air transport operation unless its weight on arrival at either the intended destination airport or any planned alternate airport would allow a full stop landing from a point 50 feet above the intersection of the obstruction clearance plane and the runway, and within

(a) for a turbine engine powered aeroplane, 60 per cent of the effective length of each runway;

(b) for reciprocating engine powered aeroplane, 70 per cent of the effective length of each runway.

(3) For the purpose of determining the allowable landing weight at the destination airport, an operator determining the landing limit shall ensure that

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

(b) the aeroplane is landed on the most suitable runway considering the probable wind speed and direction, runway conditions, the ground handling characteristics of the aircraft, and considering other conditions such as landing aids, terrain and expected variations in the approach and landing techniques, where such allowance has not been made in the scheduling of performance data.

(4) Where the runway at the landing destination is reported or forecast to be wet or slippery, the landing distance available shall be at least 115 per cent of the required landing distance unless, based on a showing of actual operating landing techniques on wet or slippery runways, a shorter

landing distance, but not less than that required by paragraph (2), has been approved for a specific type and model aeroplane and this information is included in the aeroplane flight manual.

(5) A turbine powered transport category aeroplane that would be prohibited from taking off from its destination airport because it could not meet the requirements of paragraph (2)*(a)* for mass landing for such destination airport, may take-off from the departure airport where an alternate airport is specified that meets all the requirements of paragraph (2).

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

(7) A national air operator shall ensure that a Performance Class I helicopter is able, in the event of any engine becoming inoperative in the approach and landing phase on arrival at the intended destination landing site or any planned alternate landing and before the landing decision point,

(a) to clear all obstacles on the approach path and be able to land and stop within the landing distance available; or

(b) to perform a balked landing and clear all obstacles in the flight path by an adequate margin and after the landing decision point, land and stop within the landing distance available.

(8) An air operator shall ensure that a Performance Class II helicopter is able in the event of any engine becoming inoperative in the approach and landing phase on arrival at

(a) the intended destination landing site; or

(b) any planned alternative landing site

after reaching a defined point before landing, to safely execute a forced landing within the landing distance available.

(9) In this Regulation the term "obstruction clearance plane" means a plane sloping upward from the runway at a slope of 1:20 to the horizontal, and tangent to or clearing all obstructions within a specified area surrounding the runway as shown in a profile view of that area. In the plan view, the centreline of the specified area coincides with the centreline of the runway, beginning at the point where the obstruction clearance plane intersects the centreline of the runway and proceeding to a point at least 1 500 feet from the beginning point. Thereafter, the centreline coincides with the take-off path over the ground for the runway, in the case of take-offs, or with the instrument approach counterpart, for landings, or where the applicable one of these paths has not been established, it proceeds consistent with turns of at least 4 000 foot radius until a point is reached beyond which the obstruction clearance plane clears all obstructions. This area extends laterally 200 feet on each side of the centreline at the point where the obstruction clearance plane intersects the runway and continues at this width to the end of the runway; then it increases uniformly to 500 feet on each side of the centreline at a point 1 500 feet from the intersection of the obstruction clearance plane with the runway; thereafter, it extends laterally 500 feet on each side of the centreline.

PART VIII

Flight Rules

Applicability of this Part.

119. This Part prescribes the rules of the air applicable to all flight operations.

General flight rules requirements.

120. (1) The rules set out in this Part (hereinafter referred to as the "rules of the air") shall apply to aircraft bearing the nationality and registration marks of Barbados, wherever they may be, to the extent that they do not conflict with the rules published by State over-flown.

(2) For the purposes of flight over those parts of the high seas where a Contracting State has accepted the responsibility of providing air traffic services, the appropriate Air Traffic Control Authority is the relevant authority designated by the State responsible for providing those services.

(3) The operation of an aircraft either in flight or on the movement area of an airport shall be in compliance with the general rules and, in addition, when in flight, either with the visual flight rules or instrument flight rules.

Restrictions on the operation of aircraft on the ground.

121. (1) No person shall taxi an aircraft on the movement area of an airport unless the person at the controls

(a) has been authorised by the operator, the lessee, or a designated agent;

(b) is fully competent to taxi the aircraft;

(c) is qualified to use the radio where radio communications are required; and

(d) has received instruction from a competent person in respect of airport layout, and where appropriate, information on

(i) routes;

(ii) signs;

(iii) marking;

(iv) lights;

(v) air traffic control signals and instructions, phraseology and procedures;

(e) is able to conform to the operational standards required for safe aircraft movement at the airport.

(2) An operator shall ensure that a helicopter rotor is not turned under power unless there is a pilot qualified to operate a helicopter, at the controls.

122. Before commencing take-off, a pilot in command shall ensure that

Required take-off conditions.

(a) according to the available information, the weather at the airport and the condition of the runway intended to be used will allow for a safe take-off and departure; and

(b) the runway visual range or visibility in the take-off direction of the aircraft is equal to or better than the applicable minimum.

123. (1) An operator shall ensure that a flight is not commenced or intentionally flown into expected or actual icing conditions unless the aircraft is certified and equipped to cope with such conditions.

Requirements and restrictions where flight into known or expected icing.

(2) An operator shall ensure that an aircraft is not allowed to take-off or continue to operate along a route when icing conditions are expected or encountered, without ensuring that the aircraft is certified for icing operations and has sufficient operational de-icing or anti-icing equipment.

(3) An operator shall ensure that an aircraft is not allowed to take-off when frost, ice or snow is adhering to the wings, control surfaces, propellers, engine inlets or other critical surfaces which might adversely affect the performance or controllability of the aircraft.

(4) No pilot in command shall take-off and an air operator shall ensure that a pilot is not allowed to take-off in an aircraft when conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, unless the procedures approved for the national air operator by the Director are followed to ensure ground de-icing and anti-icing is accomplished.

(5) An operator shall establish procedures to be followed when ground de-icing and anti-icing and related inspections of the aircraft are necessary.

(6) No pilot in command shall commence take-off unless the external surfaces are clear of any deposit which might adversely affect the performance and controllability of the aircraft except as permitted in the Aircraft Flight Manual.

(7) Where illumination is used to detect the formation of ice, it shall be of a type that will not cause glare or reflection such that would handicap crew members in the performance of their duties.

Cruising levels with altimeter settings.

124. The cruising levels at which a flight or a portion of a flight is to be conducted shall be in terms of

(a) flight levels, for flights at or above the lowest usable flight level or, where applicable, above the transition altitude;

(b) altitudes, for flights below the lowest usable flight level or, where applicable, at or below the transition altitude.

General minimum safe altitudes.

125. (1) An operator shall ensure that when necessary for take-off or landing, an aircraft is not operated below the following altitudes:

(a) an altitude allowing for continuation of flight or an emergency landing without undue hazard to persons or property on the surface where a power unit fails;

(b) an altitude of 1 000 feet above the highest obstacle within a horizontal radius of 600 metres of the aircraft where the aircraft is operated over any congested area of a city, town, or settlement, or over any open-air assembly of persons;

(c) an altitude of 500 feet above the surface where an aircraft is operated over uncongested areas, except over open water or sparsely populated areas where the aircraft shall not be operated closer than 150 metres to any person, vessel, vehicle, or structure.

(2) No pilot of a helicopter is subject to the proximity restrictions of these Regulations, provided the helicopter is operated in a manner that is not hazardous to persons and property on the surface.

(3) The pilot of a helicopter shall comply with any routes or altitudes for the area that are prescribed for helicopters by the Director.

(4) 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 or the responsible State, provided that such altitudes shall not be less than those established by that State.

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

(6) The procedure for establishing the minimum flight altitudes referred to in paragraphs (4) and (5) shall be approved by the Director, provided that the minima established by any procedure shall not be lower than that specified in Annex 2 of the Chicago Convention.

(7) The Director shall approve the procedures referred to in paragraph (6), after careful consideration of the probable effects of the following factors on the safety of the operation in question:

(a) the accuracy and reliability with which the position of the aircraft can be determined;

(b) the inaccuracies in the indications of the altimeters used;

(c) the characteristics of the terrain such as sudden changes in the elevation;

(d) the probability of encountering unfavorable meteorological conditions, such as severe turbulence and descending air currents;

(e) possible inaccuracies in aeronautical charts; and

(f) airspace restrictions.

Minimum safe visual flight rules altitudes for commercial air transport operations.

126. (1) A national air operator shall ensure that an aeroplane is not operated in commercial air transport operation during the day, under visual flight rules, at an altitude less than 1 000 feet above the surface or within 1 000 feet of any mountain, hill, or other obstruction to flight.

(2) A national air operator shall ensure that an aeroplane is not operated in commercial air transport operation at night, under visual flight rules, at an altitude less than 1 000 feet above the highest obstacle within a horizontal distance of five nautical miles from the centre of the intended course, or, in designated mountainous areas, less than 2 000 feet above the highest obstacle within a horizontal distance of 5 nautical miles from the centre of the intended course.

Airport operating minima.

127. (1) An operator shall establish operating minima for each airport or heliport planned to be used in operations, by a method acceptable to the Director.

(2) Operating minima referred to in paragraph (1), shall not be lower than any that may be established for such airports or heliports by the State in which the airport is located, except when specifically approved by the State.

(3) In establishing the operating minima which will apply to any particular operation, an operator shall take full account 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 final approach and take-off site or 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 aircraft for the purpose of navigation and control of the flight path during the approach 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 from the obstacles.

(4) No pilot in command of an aircraft shall commence take-off unless the weather conditions at the airport of departure are equal to or better than applicable minima for landing at that airport unless a suitable take-off alternate airport is available.

(5) When the reported meteorological visibility is below that required for take-off a pilot shall not take-off.

(6) Where no reported meteorological visibility or runway visual range is available, a take-off may only be commenced where the pilot in command can determine that the runway visual range or visibility along the take-off runway is equal to or better than the required minimum.

Required threshold crossing height for precision approaches.

128. An operator shall establish operational procedures designed to ensure that an aircraft being used to conduct precision approaches crosses the threshold by a safe margin, with the aircraft in the landing configuration and attitude.

Instrument approach operating minima requirements.

129. (1) An operator shall ensure that an aircraft is not operated to or from, an airport using operating minima lower than those which may be established for that airport by the State in which it is located unless that State specifically approves such operation.

(2) For instrument approach and landing operations, airport-operating minima below 800 metres visibility should not be authorised unless runway visual range information is provided.

(3) The Director may approve one or more instrument approach procedures designed in accordance with the classification of instrument approach and landing operations procedures to serve each instrument runway or airport utilized for instrument flight operation.

(4) The Director shall cause the instrument approach procedures and landing operations procedures to be promulgated.

General operating rules for Categories II and III operations.

130. (1) No operator shall conduct Category II or Category III operations unless

(a) each aeroplane concerned is certified for operations with a decision height below 200 feet, or no decision height, and is equipped in accordance with the standards prescribed by the Director;

(b) the operations are approved by the Director;

(c) the flight crew consists of two pilots; and

(d) the decision height is determined by a radio altimeter.

(2) A Category II or Category III instrument approach and landing operations shall not be authorised unless runway visual range information is provided.

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

(a) the decision height or alert height prescribed by the approach procedure;

(b) the decision height or alert height prescribed for the pilot in command;

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

(4) Unless otherwise authorised by the Director, a pilot operating an aircraft in a Category II or Category III approach that provides and requires use of a decision height or alert height shall not continue the approach below the authorised decision height or alert height unless the following conditions are met:

(a) the aircraft is in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal manoeuvres and where that descent rate will allow 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) visual reference containing a segment of at least 3 consecutive lights being the centre line of the approach lights or touchdown zone lights or runway lights or a combination of these;

(ii) the threshold;

(iii) the threshold markings;

(iv) the threshold lights;

(v) the touchdown zone or touchdown zone markings; and

(vi) the touchdown zone lights.

(5) Unless otherwise authorised by the Director, a pilot operating an aircraft shall immediately execute an appropriate missed approach whenever, prior to touchdown, the requirements of paragraph (3), are not met.

(6) An operator shall ensure that an aircraft using a Category III approach without decision height shall not be landed except in accordance with the provisions of the letter of authorisation issued by the Director.

(7) Paragraphs (1) through (6) shall not apply to operations conducted by a national air operator issued with a certificate under the *Civil Aviation (Air Operator Certification and Administration) Regulations, 2007*.

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(8) A national air operator shall ensure that an aircraft in a Category II or Category III operations is conducted in accordance with his Operations Specifications.

(9) An operator before commencing a Category II or Category III programme shall ensure that

(a) the pilot in command and co-pilot of the aircraft hold the appropriate authorisations and ratings prescribed under the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007*;

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(b) each flight crew member has adequate knowledge of, and is familiar with, the aircraft and the procedures to be used; and

(c) the instrument panel in front of the pilot who is controlling the aircraft has appropriate instrumentation for the type of flight control guidance system that is being used.

(10) Unless otherwise authorised by the Director, an operator shall ensure that an aircraft is not operated in a Category II or Category III programme unless each ground component required for that operation and the related airborne equipment is installed and operating.

(11) An operator shall submit a low visibility operations programme to the Director for approval prior to conducting Category II and Category III operations.

Requirements for Category II and Category III manual.

131. (1) Except as provided in paragraph (6) an operator shall ensure that an aircraft is not operated in a Category II or a Category III operations unless

(a) there is available on such aircraft a current and approved 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 appropriate manual; and

(c) the instruments and equipment listed in the manual that are required for a particular Category II or Category III operation have been inspected and maintained in accordance with the maintenance programme contained in the manual.

(2) Where an operator wishes to amend his Category II or III manual he shall submit such amendment to the Director for approval.

(3) Where a submission referred to in paragraph (2) is accompanied by a request to initiate operations in accordance with an amendment, such operations shall not commence unless the Director so approves.

(4) An operator shall ensure that his Category II or Category III manual meets the requirements of the Aircraft Operations Standards.

(5) An operator shall keep a current copy of each approved manual at his principal base of operations and shall make each manual available for inspection upon request by the Director.

(6) Paragraphs (1) and (4) shall not apply to operations conducted by a national air operator issued with a certificate under the *Civil Aviation (Air Operator Certification and Administration) Regulations, 2007*. S.I. 2007 No. 173.

Procedures to be followed where a diversion decision is to be made.

132. (1) Except as provided in paragraph (2), a pilot in command shall land an aircraft at the nearest suitable airport at which a safe landing can be made whenever an engine of an aircraft fails or is shut down to prevent possible damage.

(2) Where only one engine of an aircraft having three or more engines fails, or its rotation is stopped, a pilot in command may proceed to an airport where in his opinion proceeding to that airport is as safe as landing at the nearest suitable airport after considering the

(a) nature of the malfunction and the possible mechanical difficulties that may occur should the flight be continued;

(b) altitude, weight, and usable fuel at the time of engine stoppage;

(c) weather conditions en route and at possible landing points;

(d) air traffic congestion;

(e) terrain characteristics; and

(f) familiarity with the airport to be used.

Procedures to be used for formation flight.

133. (1) No person shall operate an aircraft so close to another aircraft as to create a collision hazard.

(2) No person shall operate an aircraft, carrying passengers for hire, in formation flight.

(3) An operator shall ensure that an aircraft is not flown in formation except by pre-arrangement among the pilot in command of the aircraft taking part in the flight and, for formation flight in controlled airspace, in accordance with the conditions prescribed by the appropriate Air Traffic Control Authority.

(4) Conditions referred to in paragraph (3), shall include the requirement that

(a) the formation operates as a single aircraft with regard to navigation and position reporting;

(b) separation between aircraft in the formation flight shall be the responsibility of the flight leader and the pilots in command of the other aircraft in the flight and shall include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and break-away; and

(c) a distance not exceeding one kilometre laterally and longitudinally and 100 feet vertically from the flight leader shall be maintained by each aircraft.

General right-of-way rules.

134. (1) A pilot of an aircraft in flight shall maintain vigilance so as to see and avoid other aircraft.

(2) A pilot of an aircraft in flight that has the right of way, has the right to proceed on the same heading and at the same speed before any other aircraft.

(3) Notwithstanding the right-of-way referred to in paragraph (2), a pilot shall be responsible to take such action, including collision avoidance manoeuvres based on resolution advisories provided by airborne collision avoidance system equipment, so as to best avoid collision.

(4) A pilot of an aircraft which does not have right of way in flight shall give way to an aircraft which has the right of way and shall not pass over or under the other aircraft or cross ahead of it unless passing well clear of it.

(5) A person in charge of an aircraft in distress or an aircraft that is compelled to land has the right-of-way over all other air traffic.

(6) Where aircraft of the same category are converging at approximately the same altitude, except head-on or approximately so, the pilot of the aircraft which has the other to its right shall give way.

(7) Where aircraft of different categories are converging in flight, the following right of way rules shall apply:

(a) a balloon has the right-of-way over any other category of aircraft;

(b) a glider has the right-of-way over an airship, aeroplane, or rotorcraft; and

(c) an airship has the right-of-way over an aeroplane or rotorcraft.

(8) An aircraft towing or refuelling another aircraft has the right-of-way over all other engine-driven aircraft, except aircraft in distress.

(9) Where aircraft are approaching each other head-on, or approximately so, the pilot of each aircraft shall alter course to the right.

(10) An aircraft that is being overtaken has the right-of-way and a pilot of the overtaking aircraft shall alter course to the right to pass well clear.

(11) An aircraft, while on final approach to land or while landing, has the right-of-way over other aircraft in flight or operating on the surface.

(12) Where two or more aircraft are approaching an airport for the purpose of landing, the aircraft at the lower altitude has the right-of-way.

(13) Notwithstanding paragraph (12), power driven heavier than air aircraft shall give way to gliders for the purpose of landing.

(14) An operator in charge of an aircraft taxiing on the manoeuvring area of an airport shall give way to aircraft taking off or about to take-off.

(15) In case of danger of collision between two aircraft taxiing on the movement area of the airport, the following shall apply:

(a) where two aircraft are approaching head on or approximately so, each shall stop or where practicable alter its course to the right so as to keep well clear;

(b) where two aircraft are on a converging course, the one which has the other on its right shall give way;

(c) an aircraft which is being overtaken by another aircraft shall have the right of way and the overtaking aircraft shall keep well clear of the other aircraft;

(d) an aircraft taxiing in the manoeuvring area shall stop and hold at all taxi-holding positions unless otherwise authorised by the airport control tower; and

(e) an aircraft taxiing on the manoeuvring area shall stop and hold at lighted stop bars and may proceed further when the lights are switched off.

Right-of-way rules for water operations.

135. (1) An operator shall ensure that an aircraft operating on the water shall, as far as possible, keep clear of all vessels and avoid impeding their navigation and shall give way to any vessel or other aircraft that is given the right-of-way by these Regulations.

(2) When two aircraft or an aircraft and a vessel, are on crossing courses, the aircraft or vessel which has the other on its right shall give way so as to keep well clear.

(3) When two aircraft or an aircraft and a vessel, are approaching head-on, or approximately so, each shall alter its course to the right to keep well clear.

(4) An aircraft or vessel that is being overtaken has the right-of-way, and the overtaking aircraft or vessel, shall alter course to keep well clear.

(5) An aircraft landing on or taking off from the water shall, as far as practicable, keep well clear of all aircraft and vessels on the water and avoid impeding their navigation.

(6) Where two aircraft or an aircraft and a vessel, approach so as to pose a risk of collision, each aircraft or vessel shall proceed with careful regard to existing circumstances, including the limitations of the respective aircraft or vessel.

Requirements for the use of aircraft lights.

136. (1) Except as provided in paragraph (4), all aircraft in flight shall display

(a) anti-collision lights, to attract attention to the aircraft at all times, and

(b) navigation lights intended to indicate the relative path of the aircraft to an observer, from sunset to sunrise or during any other period specified by the appropriate authority.

(2) Except as provided in paragraph (4), no person shall park or move an aircraft at night in a movement area or in dangerous proximity to a movement area of an airport, unless the aircraft

(a) has lighted navigation lights to attract attention to the aircraft;

(b) has display lights at the extremities of its structure; or

(c) is in an area that is marked by obstruction lights.

(3) An operator of an aircraft shall display red anti-collision beacon lights prior to commencement of engine start and while engines are running.

(4) A pilot shall be permitted to switch off or reduce the intensity of any flashing light where

(a) such light adversely affects or is likely to adversely affect the satisfactory performance of duties of persons engaged in an aircraft operation; or

(b) such light may subject an outside observer to harmful dazzle.

(5) An operator shall ensure that an aircraft on water is not anchored between sunset and sunrise or such other period as may be prescribed by the appropriate authority, unless that aircraft

(a) has lighted anchor lights; or

(b) is in an area where anchor lights are not required on aircraft or vessels.

Requirements for simulated instrument flight.

137. (1) An operator shall ensure that an aircraft is not operated in simulated instrument flight unless

(a) that aircraft has fully functioning dual controls;

(b) the pilot operating the simulated instrument flight is accompanied at the other control seat by a safety pilot who holds at least a private pilot licence with category and class ratings appropriate to the aircraft being flown; and

(c) the safety pilot has adequate vision forward and to each side of the aircraft, or a competent observer in communication with the safety pilot occupies a position in the aircraft from which the field of vision of the observer adequately supplements the vision of the safety pilot.

(2) An operator shall ensure that simulated instrument flight conditions are not conducted during commercial air transport operations.

Requirements for in-flight simulation of abnormal situations.

138. An operator shall ensure that an abnormal or emergency situation is not simulated during commercial air transport operations.

Restrictions on dropping, spraying and towing.

139. Except under conditions prescribed by the Director and as indicated by relevant information, advice and clearance from air traffic control authority a pilot shall not

(a) drop, dust or spray from an aircraft;

(b) tow an aircraft or other object; or

(c) allow parachute descents.

Restrictions on aerobatic flight.

140. (1) No person shall operate an aircraft in aerobatic flight

(a) over any city, town or settlement;

(b) over an open air assembly of persons;

(c) within the lateral boundaries of the surface areas of Class B, C, D or E airspace designated for an airport;

(d) below an altitude of 1 500 feet above the land or sea surface; or

(e) when the flight visibility is less than 3 nautical miles.

(2) No person shall operate an aircraft in manoeuvres exceeding a bank angle of 60 degrees or pitch angle of 30 degrees from level flight attitude unless all occupants of the aircraft are wearing parachutes that were packed in the past 12 months by a qualified parachute rigger.

Where flight test can be conducted.

141. No person shall flight-test an aircraft except over open water, or sparsely populated areas having light traffic.

Use of an aircraft in a prohibited or restricted area.

142. (1) No person shall operate an aircraft in a prohibited area or in a restricted area except in accordance with the conditions of the restrictions or by permission of the State over whose territory the areas are established.

(2) In this Regulation, "a prohibited area" or "restricted area" means an area designated by Director to be prohibited or restricted area.

Restrictions on operations in minimum navigation performance specification or reduced vertical separation minimum.

143. (1) No operator shall permit an aircraft of Barbados registration to be operated in the North Atlantic airspace designated as minimum navigation performance specification airspace or in airspace designated as reduced vertical separation minimum, without the written authorisation of the Director.

(2) Where an operator wishes to apply to operate an aircraft under the conditions set out in paragraph (1), he shall apply to the Director in the prescribed form.

(3) No operator shall operate an aircraft in minimum navigation performance specification airspace or reduced vertical separation minimum airspace, except in accordance with the conditions of the procedures and restrictions required for this airspace.

Requirements where operations are conducted on or in the vicinity of an uncontrolled airport.

144. (1) A pilot of an aircraft operated on or in the vicinity of an airport shall, whether or not within an airport traffic zone

(a) observe other airport traffic for the purpose of avoiding collision; and

(b) conform with or avoid the pattern of traffic formed by other aircraft in operation.

(2) When approaching to land at an airport without an operating control tower, each pilot of

(a) an aircraft shall make all turns to the left or shall comply with any traffic patterns established by the Civil Aviation Authority having jurisdiction over that airport; and

(b) a helicopter shall avoid the pattern of traffic flow of aircraft.

(3) When departing an airport without an operating control tower, a pilot of an aircraft shall make all turns to the left or shall comply with any traffic patterns established by the Civil Aviation Authority having jurisdiction over that airport.

(4) A pilot of an aircraft shall land and take-off into the wind unless safety, the runway configuration or traffic considerations determine that a different direction is preferable.

Required altitudes for turbojet or large aircraft on entering airport traffic pattern.

145. (1) When arriving at an airport, the pilot in command of a turbojet, turbofan or large aircraft shall enter the traffic pattern at least 1 500 feet above ground level until further descent is required for landing.

(2) When departing an airport, the pilot in command of a turbojet, turbofan or large aircraft shall climb to 1 500 feet above ground level as rapidly as practicable.

Compliance with visual and electronic glide slopes.

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

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

Suspension of operations for commercial air transport operations.

147. Where a pilot in command or an air operator knows of conditions, including airport and runway conditions, that are a hazard to safe operations, such person shall restrict or suspend all commercial air transport operations to such airport and runways as necessary until those conditions are corrected.

Continuation of flight in commercial air transport when destination airport is temporarily restricted.

148. No pilot in command shall allow a flight to continue toward any airport of intended landing where commercial air transport operations have been restricted or suspended, unless

(a) in the opinion of the pilot in command, the conditions that are a hazard to safe operations may reasonably be expected to be corrected by the estimated time of arrival; or

(b) there is no safer procedure.

149. (1) Interception of civil aircraft by a military aircraft of an armed force of Barbados shall be conducted in a manner

Requirements where interception occurs.

(a) to have due regard for the safety of navigation of civil aircraft; and

(b) as are prescribed by the Director.

(2) When intercepted by a military aircraft, the pilot in command of a civil aircraft shall comply with the international standards when interpreting and responding to visual signals as specified in the aircraft operations standards.

150. (1) A pilot in command shall obtain an air traffic control clearance prior to operating a controlled flight, or any portion thereof.

Requirements for air traffic control clearances.

(2) A pilot in command shall request an air traffic control clearance through the submission of a flight plan to an air traffic control facility.

(3) Whenever a pilot in command of an aircraft has requested a clearance involving priority, he shall where requested by the appropriate air traffic control facility and upon completion of flight, submit a report explaining the necessity for such priority.

(4) A person operating an aircraft at a controlled airport shall not taxi on the manoeuvring area or any runway without clearance from the airport control tower.

151. (1) When an air traffic control clearance has been obtained, a pilot in command shall not deviate from the clearance, except in an emergency unless he obtains an amended clearance.

Requirement to adhere to air traffic control clearances.

(2) When operating in airspace requiring controlled flight, a pilot in command shall not operate contrary to air traffic control instructions, except in an emergency.

(3) A pilot in command who in an emergency deviates from an air traffic control clearance shall notify air traffic control of that deviation as soon as possible.

Communication requirements.

152. (1) A pilot operating an aircraft on a controlled flight shall maintain a continuous listening watch on the appropriate radio frequency of, and establish two-way communication as required with, the appropriate air traffic control facility.

(2) Regulations for communication failure in visual meteorological conditions and instrument meteorological conditions are prescribed in regulations 170 and 188 respectively.

(3) A person operating an instrument flight rules flight outside controlled airspace but within or into areas, or along routes, designated by the appropriate Air Traffic Control Authority shall maintain an air-ground voice communication on the appropriate communication channel and establish two-way communication as necessary with the air traffic service facility providing flight information service.

Pilot in command to fly along assigned route.

153. (1) Unless otherwise authorised or directed by the appropriate air traffic control facility, a pilot in command of a controlled flight shall, as far as practicable when on

(a) an established air traffic control route, operate along the defined centre line of that route; or

(b) any other route, operate directly between the navigation facilities and points defining that route.

(2) Where a pilot in command deviates from the requirements of paragraph (1), he shall notify the appropriate air traffic control facility as soon as possible.

(3) A pilot in command of a controlled flight operating along an air traffic control route defined by reference to very high frequency omni range, shall change over for primary navigation guidance from the facility behind

the aircraft to that ahead of it at, or as close as operationally feasible to, the change-over point where established.

(4) Where an automatic dependent surveillance agreement is in place, the air traffic services facility shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the automatic dependent surveillance event contract.

Procedures where inadvertent changes occur.

154. Where in a controlled flight a pilot in command inadvertently deviates from the current flight plan he shall

(a) where the aircraft is off track adjust the heading of the aircraft to regain track as soon as practicable;

(b) where the average true airspeed at cruising level between reporting points varies from that given in the flight plan, or is expected to vary by plus or minus 5 per cent of the true airspeed, inform the appropriate air traffic control facility;

(c) where the time estimated for a reporting point, flight information region boundary or destination airport, whichever comes first, is found to be in excess

(i) of 3 minutes from that notified to air traffic control facility; or

(ii) such other period of time as is prescribed by the appropriate Air Traffic Control Authority, notify as soon as possible the appropriate air traffic control facility and give a revised estimated time.

Procedures where there are intended changes for air traffic control clearance.

155. Requests for flight plan changes shall include the following information:

(a) aircraft identification;

(b) in respect of a change in cruising level, the requested new cruising level and cruising speed at this level and revised time estimates, when applicable, at subsequent flight information region boundaries;

(c) in respect of a new route without destination change, the flight rules, a description of the new route of flight including related flight plan data beginning with the position from which requested change of route is to commence, revised time estimates and any other pertinent information;

(d) in respect of a destination change, the flight rules under which the flight will operate, a description of the revised route of the flight to the revised destination airport including related flight plan data beginning with the position from which the requested change of route is to commence, revised time estimates, alternate airport and any other pertinent information.

Requirement for position reports.

156. (1) A pilot of a controlled flight shall, unless exempted by the appropriate Air Traffic Control Authority, report to the appropriate air traffic control facility, as soon as possible, the time and level of passing each designated compulsory reporting point, together with any other required information.

(2) A pilot of a controlled flight shall make position reports in relation to additional points or intervals when requested by the appropriate air traffic control facility.

(3) A pilot of a controlled flight shall, except when landing at a controlled airport, advise the appropriate air traffic control facility as soon as it ceases to be subject to air traffic control services.

Procedures where operations are conducted on or in the vicinity of a controlled airport.

157. (1) An operator shall ensure that an aircraft is not operated to, from, through, or on an airport having an operational control tower unless two-way communications are maintained between that aircraft and the control tower.

(2) On arrival at an airport, a pilot in command shall establish communications required by paragraph (1), at least 5 nautical miles from the airport when operating from the surface up to and including 2 500 feet.

(3) When departing an airport, a pilot in command shall establish communications with the control tower prior to taxi.

(4) No person shall, at any airport with an operating control tower, operate an aircraft on a runway or taxiway or take-off or land an aircraft, unless an appropriate clearance has been received from the air traffic control facility.

(5) A clearance to "taxi to" the take-off runway authorises the person to cross other runways during the taxi to the assigned runway but is not a clearance to cross or taxi on to that runway.

(6) A clearance to "taxi to", any other point on the airport authorises a person to cross all runways that intersect the taxi route to the assigned point.

(7) Where the radio fails or two-way communication is lost in the vicinity of a controlled airport, a pilot in command may continue a visual flight rules flight operation using the procedures set out in regulation 170 and land the aircraft when

(a) the weather conditions are at or above basic visual flight rules minima; and

(b) clearance to land is received by light signals.

(8) The two-way communications failure procedures under regulation 188 shall apply during instrument flight rules operations in the vicinity of a controlled airport.

Procedures where there has been unlawful interference on board an aircraft.

158. (1) A pilot in command shall, when and where possible, notify the appropriate air traffic control facility when an aircraft is being subjected to unlawful interference, including

(a) any significant circumstances associated with the unlawful interference, and

(b) any deviation from the current flight plan necessitated by the circumstances.

(2) In this Regulation "interference" means

(a) any act which causes or threatens the safety of the aircraft or of persons on board the aircraft;

(b) the use of abusive language or insulting words towards a crew member or a passenger on the aircraft; or

(c) when used in relation to a crew member, threats of assaults or intimidation of a crew member while he is performing his duties.

Time check requirements.

159. (1) A pilot in command shall use Universal Coordinated Time, expressed in hours and minutes of the 24 hour day beginning at midnight, during flight operations.

(2) A pilot in command shall obtain a time check prior to operating a controlled flight and at such other times as may be necessary during the flight.

Universal signals requirements.

160. (1) An operator shall ensure that procedures to be followed upon the observation or reception of the designated universal aviation signals are established.

(2) Upon observing or receiving any of the designated universal aviation signals, a person operating an aircraft shall take such action as may be required by the interpretation of the signal.

(3) Universal signals shall have the meanings designated in the aircraft operations standards.

(4) A person using universal signals in the movement of aircraft shall use them only for the purpose indicated.

(5) A person shall not use signals likely to cause confusion with universal aviation signals.

Visual flight rules and navigation requirements.

161. Navigation for flights under visual flight rules shall be accomplished by visual reference to landmarks.

Restrictions on operations under visual flight rules.

162. An operator shall ensure that an aircraft is not operated under visual flight rules when

(a) the flight visibility is less than, or at a distance from the clouds that is less than that prescribed; or

(b) the corresponding altitude and class of airspace set out in the Aircraft Operations Standards exists.

Visual flight rules and weather minimums for take-off and landing.

163. (1) No pilot shall enter the traffic pattern, land or take-off an aircraft under visual flight rules from an airport located in Class B, Class C, Class D or Class E airspace unless the reported

(a) ceiling is at least 1 500 feet; and

(b) ground visibility is at least 3 nautical miles, where reported.

(2) Where the ground visibility is not reported, the pilot shall conduct such flight as if flight visibility is 3 nautical miles.

(3) Where an airport located in Class G airspace below 1 200 feet above ground level, a pilot shall not enter the traffic pattern, land or take-off an aircraft under visual flight rules unless

(a) in an aeroplane, the visibility is at least 1 nautical mile and the aeroplane can be operated clear of clouds within one half nautical mile of the runway; or

(b) in a helicopter it can be operated clear of clouds at a speed that allows the pilot adequate opportunity to see any air traffic or obstruction in time to avoid a collision.

Special visual flight rules flight operation.

164. (1) No pilot shall conduct a special visual flight rules flight operation to enter the traffic pattern, land or take-off an aircraft under special visual flight rules from an airport located in Class B, Class C, Class D or Class E airspace unless

(a) given clearance by an Air Traffic Control Unit;

(b) the aircraft remains clear of clouds; and

(c) the flight visibility is at least 1 nautical mile.

(2) No pilot shall conduct a special visual flight rules flight operation in an aircraft between sunset and sunrise unless authorised by the appropriate Air Traffic Control Unit and

(a) the pilot in command has a valid licence and rating for instrument flight rules operations; and

(b) the aircraft is certified for instrument flight rules flight.

Visual flight rules in cruising altitudes.

165. (1) A pilot operating an aircraft in level cruising flight under visual flight rules at altitudes above 3 000 feet from the ground or water, shall maintain

(a) for magnetic courses from 0° to 179°, any odd thousand mean sea level altitudes or flight level plus 500 feet, such as 3 500 feet, 5 500 feet or flight level 215;

(b) for magnetic courses from 180° to 359°, any even thousand mean sea level altitude or flight level plus 500 feet, such as 4 500 feet, 6 500 feet or flight level 225.

(2) A pilot may deviate from cruising altitudes specified in paragraph (1) only when

(a) authorised by the Air Traffic Control;

(b) operating in a holding pattern; or

(c) manoeuvring in turns.

Restrictions on visual flight rules flights.

166. A pilot of a visual flight rules flight shall obtain and comply with air traffic control clearances and maintain a listening watch before and during operations

(a) within Classes B, C and D airspace;

(b) as part of airport traffic at controlled airports; and

(c) under special visual flight rules referred to in regulation 167.

Restrictions on operation of visual flight rules.

167. Unless authorised by the appropriate air traffic control authority, a pilot shall not operate in visual flight rules flight

(a) above flight level 85; or

(b) at transonic and supersonic speeds.

Procedure where there is weather deterioration below visual meteorological conditions.

168. A pilot of a visual flight rules flight operated as a controlled flight shall, when he finds it is not practical or possible to maintain flight in visual meteorological conditions in accordance with the air traffic control flight plan

(a) request an amended clearance enabling the aircraft to continue in visual meteorological conditions to its destination or to an

alternative airport, or to leave the airspace within which an air traffic control clearance is required;

(b) where no clearance can be obtained, continue to operate in visual meteorological conditions and notify the appropriate air traffic control facility of the action being taken either to leave the airspace concerned or to land at the nearest suitable airport;

(c) where operating within a control zone, request authorisation to operate as a special visual flight rules flight; or

(d) where currently rated for instrument flight rules operations, request clearance to operate under instrument flight rules.

Changing from visual flight rules to instrument flight rules.

169. A pilot operating under visual flight rules who wishes to change to instrument flight rules shall

(a) where a flight plan was submitted, communicate the necessary changes to be effected to his current flight plan; or

(b) submit an amended flight plan to the appropriate air traffic control facility and obtain a clearance prior to operating under instrument flight rules when in controlled airspace.

Two-way radio communication failure in visual flight rules.

170. Where radio failure occurs in visual flight rules while under air traffic control, or where visual flight rules conditions are encountered after such radio failure, a pilot shall

(a) continue the flight under visual flight rules;

(b) land at the nearest suitable airport; and

(c) report arrival to air traffic control facility by the most expeditious means possible.

171. No pilot shall operate an aircraft in controlled airspace under instrument flight rules unless he has

Restrictions on instrument flight rules flights in controlled airspace.

(a) filed an instrument flight rules flight plan; and

(b) received an appropriate air traffic control clearance.

172. (1) A pilot in command of an instrument flight rules flight, operating outside controlled airspace, but within or into areas, or along routes, designated by the appropriate Air Traffic Control Authority, shall

Procedures for instrument flight rules flights outside controlled airspace.

(a) maintain a listening watch on the appropriate radio frequency; and

(b) establish two-way communication, as necessary, with the air traffic control facility providing flight information service.

(2) A pilot in command of an instrument flight rules flight operating outside controlled airspace for which the appropriate air traffic control authority requires a flight plan shall

(a) maintain a listening watch on the appropriate radio frequency;

(b) establish two-way communication, as necessary, with the air traffic control facility providing flight information service;

(c) report the position of the aircraft as specified for controlled flights.

173. Unless otherwise authorised by the Director, a pilot operating an aircraft in commercial air transport operations shall not accept a clearance to take-off from an airport under instrument flight rules unless weather conditions are at or above

Procedures for instrument flight rules take-off minima for commercial air transport.

(a) 1 nautical mile visibility for aircraft, other than helicopters, having two engines;

(b) $^1/_2$ nautical mile visibility for aircraft having more than two engines; or

(c) $^1/_2$ nautical mile visibility for helicopters.

Restrictions on take-off or landing under instrument flight rules operations.

174. (1) Except where necessary for take-off or landing no person shall operate an aircraft under instrument flight rules

(a) below the applicable minimum altitudes prescribed by the relevant Civil Aviation Authority having jurisdiction over the airspace being overflown; or

(b) where no applicable minimum altitude is prescribed by the relevant Civil Aviation Authority

(i) over high terrain or in mountainous areas, at a level which is at least 2 000 feet above the highest obstacle located within 8 km of the estimated position of the aircraft; and

(ii) elsewhere than as specified in paragraph (i), at a level which is at least 1 000 feet above the highest obstacle located within 8 km of the estimated position of the aircraft.

(2) Where a minimum en route altitude and a minimum obstacle clearance altitude are prescribed for a particular route or route segment, a pilot may operate an aircraft below the minimum en route altitude down to, but not below the minimum obstacle clearance altitude when within 22 nautical miles of the very high VHF Omni Range concerned.

(3) Where a pilot is unable to communicate with an air traffic control facility, he shall climb to a higher minimum instrument flight rules altitude immediately after passing the point beyond which that minimum altitude applies.

(4) Where there are intervening obstructions, a pilot shall climb to a point above which the higher minimum altitude referred to in paragraph (4), applies, at or above the applicable minimum clearance altitude.

(5) For the purposes of paragraph (2) "minimum en-route altitude" and "minimum obstacle clearance altitude" are altitudes that are published on aeronautical maps and charts which indicate the minimum altitude that an aircraft is allowed to fly along a specific route and the minimum altitude that ensures the required separation from obstructions on the ground, respectively.

Minimum altitudes for use of an autopilot.

175. (1) For en route operations, no pilot shall use an autopilot at an altitude which is less than 500 feet above the terrain.

(2) Where the maximum altitude loss, specified in the Aircraft Flight Manual for a malfunction under cruise conditions referred to in paragraph (1), when multiplied by 2 is greater than 500 feet, then such altitude becomes the controlling minimum altitude for use of the autopilot.

(3) Except for auto-land, for instrument approach operations, a person shall not use an autopilot at an altitude above the terrain that is less than 50 feet below the minimum decision altitude or decision height.

(4) Where the maximum altitude loss specified in the Aircraft Flight Manual for a malfunction under approach conditions referred to in paragraph (3) when multiplied by 2 is more than 50 feet, then such altitude becomes the controlling minimum altitude for use of the autopilot.

(5) For Category III operations the Director may approve the use of a flight control guidance system with automatic landing capability to touchdown.

Instrument flight rules cruising altitude or flight level in controlled airspace.

176. A pilot operating an aircraft under instrument flight rules in level cruising flight in controlled airspace shall maintain the altitude or flight level assigned that aircraft by the air traffic control facility.

Instrument flight rules cruising altitude or flight level in uncontrolled airspace.

177. (1) A pilot operating an aircraft in level cruising flight under instrument meteorological conditions at altitudes above 3 000 feet from the ground or water, shall maintain

(a) for magnetic courses from 0 to 179, any thousand mean sea level altitude or flight level, such as 5 000 feet, 7 000 feet, or flight level 210; and

(b) for magnetic courses from 180 to 359, any even thousand mean sea level altitudes or flight level, such as 4 000 feet, 6 000 feet or flight level 220.

(2) A pilot may deviate from the cruising altitudes specified in paragraph (1), only when

(a) authorised by the Air Traffic Control Authority;

(b) operating in a holding pattern; or

(c) manoeuvring in turns.

Instrument flight rules radio communications.

178. (1) A pilot in command of an aircraft operated under instrument flight rules in controlled airspace shall have a continuous watch maintained on the appropriate frequency and shall report by radio as soon as possible

(a) the time and altitude of passing each designated reporting point, or the reporting points specified by the Air Traffic Control Authority, except that while the aircraft is under radar control, only the passing of those reporting points specifically requested by Air Traffic Control Authority, need be reported;

(b) any unforecast weather conditions encountered; and

(c) any other information which may affect the safety of flight, such as hazardous weather or abnormal radio station indications.

179. (1) A pilot in command of an aircraft operated in controlled airspace under instrument flight rules shall report as soon as practical to the Air Traffic Control Authority any malfunctions of navigational, approach or communication equipment occurring in flight.

Requirement for malfunction reports for operation under instrument flight rules in controlled airspace.

(2) A pilot in command shall include in his report under paragraph (1)

(a) the aircraft identification;

(b) the equipment affected;

(c) the degree to which the capability of the pilot to operate under instrument flight rules in the air traffic control area is impaired; and

(d) the nature and extent of assistance desired from Air Traffic Control.

180. No pilot shall continue an instrument flight rules flight toward an airport or heliport of intended landing, unless the latest available meteorological information indicates that the conditions at that airport, or at least one destination alternate airport will, at the expected time of arrival, be at or above the specified instrument approach minima.

Continuation of instrument flight rules flight toward a destination.

181. (1) No person shall make an instrument approach at an airport except in accordance with instrument flight rules weather minima and instrument approach procedures set forth in the operations specifications of the air operator.

Instrument approach procedures and instrument flight rules landing minimums.

(2) The instrument approach referred to in paragraph (1), may be continued below decision height and the landing may be completed provided that the required visual reference is established at the decision height and is maintained.

Commencement of an instrument approach.

182. (1) No pilot in command or the pilot to whom conduct of a flight has been delegated may commence an instrument approach regardless of the reported runway visual range or visibility but such instrument approach shall be continued beyond the outer marker, or equivalent position, where the reported runway visual range or visibility is less than the applicable minima.

(2) Where after passing the outer marker or equivalent position in accordance with paragraph (1), the reported runway visual range falls below the applicable minima, the approach may be continued to decision height.

(3) Where no outer marker or equivalent position exists, the pilot in command or the pilot to whom conduct of the flight has been delegated shall make the decision to continue or abandon the approach before 1 000 feet above the airport on the final approach segment.

Procedures for instrument approaches to civil airports.

183. (1) A pilot operating an aircraft in accordance with instrument flight rules shall use a standard instrument approach procedure prescribed by the authorities having jurisdiction over the airport, unless otherwise authorised by the Air Traffic Control Authority.

(2) For the purpose of this Regulation, when the approach procedure being used provides for and requires the use of a decision height, the authorised decision height is the highest of the following:

(a) the decision height prescribed by the approach procedure;

(b) the decision height prescribed for the pilot in command; or

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

Requirements for operation below decision height or minimum decent altitude.

184. (1) Where a decision height or minimum descent altitude is applicable, a pilot shall not operate an aircraft at any airport or heliport 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 can be made at a normal rate of descent using normal manoeuvres;

(b) the flight visibility is not less than the visibility prescribed in the standard instrument approach being used;

(c) 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;

(iii) the threshold markings;

(iv) threshold lights;

(v) the runway end identifier lights;

(vi) the visual approach slope indicator;

(vii) the touchdown zone or touchdown zone markings;

(viii) the touchdown zone lights;

(ix) the runway or runway markings; or

(x) the runway lights.

(2) For commercial air transport operations the pilot in command shall ensure that the descent rate referred to in paragraph (1)*(a)*, allows touchdown to occur within the touchdown zone of the runway of intended landing.

(3) The visual references under this Regulation shall not apply to Category II and Category III operations.

Execution of missed approach procedures.

185. A pilot operating a civil aircraft shall not land that aircraft when the flight visibility is less than the visibility prescribed in the standard instrument approach procedure being used unless the required visual cues are present.

Requirements for landing during instrument meteorological conditions.

186. (1) A pilot operating an aircraft shall immediately execute an appropriate missed approach procedure when one of the following conditions exists:

(a) whenever the required visual reference criteria are not met in the following situations:

(i) when the aircraft is being operated below minimum descent altitude; 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;

(b) whenever an identifiable part of the airport is not distinctly visible to the pilot during a circling manoeuvre at or above minimum descent height, unless the inability to see an identifiable part of the airport results only from a normal bank of the aircraft during the circling approach.

Procedure where there is a change from instrument flight rules flight to visual flight rules flight.

187. (1) A pilot electing to change from an instrument flight rules flight to a visual flight rules flight shall notify the appropriate air traffic control facility specifically that the instrument flight rules flight is cancelled and then communicate the changes to be made to his current flight plan.

(2) When a pilot operating under instrument flight rules encounters visual meteorological conditions, he may not cancel the instrument flight rules flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

Procedure where there is a two-way radio communications failure in instrument flight rules.

188. (1) Where two-way radio communication failure occurs in instrument flight rules conditions, or where continued flight in visual flight rules is judged not feasible, a pilot shall continue the flight

(a) by the route assigned in the last air traffic control clearance received;

(b) by the direct route from the point of radio failure to the fix, route or airway specified in the vector clearance where being radar vectored;

(c) by the route that Air Traffic Control Authority has advised may be expected in a further clearance in the absence of an assigned route; or

(d) by the route filed in the flight plan in the absence of an assigned route or a route that Air Traffic Control Authority has advised may be expected in a further clearance;

(e) at the highest of the following altitudes or flight levels for the route segment being flown:

(i) the altitude or flight level assigned in the last air traffic control clearance received;

(ii) the minimum altitude, converted where appropriate, to minimum flight level for instrument flight rules operations; or

(iii) the altitude or flight level that the Air Traffic Control Authority has advised may be expected in a further clearance;

(f) commence descent or descent and approach when the clearance limit is at a fix position from which an approach begins

(i) as close as possible to the "expect approach time" where one has been received; or

(ii) where one has not been received, as close as possible to the estimated time of arrival as calculated from the filed or amended, estimated time en route;

(g) where the clearance limit is not a position fix from which an approach begins

(i) leave the clearance limit at the "expect approach time" where one has been received, or where none has been received, upon arrival over the clearance limit;

(ii) proceed to a position fix from which an approach begins; and

(iii) commence descent or descent and approach as close as possible to the estimated time of arrival as calculated from the filed or amended estimated time en route.

PART IX

Passengers and Passenger Handling

Unacceptable conduct of passenger.

189. (1) No person on board an aircraft shall interfere with a crew member in the performance of his duties.

(2) A passenger shall fasten his seat belt and keep it fastened while the seat belt sign is lit.

(3) No person on board an aircraft shall recklessly or negligently act or omit to act in such a manner as to endanger the aircraft or persons and property therein.

(4) No person shall conceal himself or cargo on board an aircraft.

(5) No person shall smoke

(a) while the no-smoking sign is lit; or

(b) in any aircraft lavatory.

(6) No person shall tamper with, disable or destroy any smoke detector installed in any aircraft lavatory.

(7) No person shall enter or be on an aircraft when under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants is likely to be endangered.

(8) A passenger shall from the time of boarding an aircraft to the time of disembarking an aircraft comply with all safety instructions given by a crew member.

Requirement for refuelling or defuelling with passengers embarking, on board or disembarking.

190. (1) An operator shall establish operational procedures for refuelling or defuelling an aircraft while passengers are embarking, on board or disembarking the aircraft.

(2) No pilot in command shall allow an aircraft to be refuelled when passengers are embarking on board or disembarking an aircraft unless

(a) the aircraft is manned by qualified personnel ready to initiate and direct an evacuation;

(b) two-way communication is maintained between qualified personnel in the aircraft and the ground crew supervising the refuelling; and

(c) the pilot complies with the operational procedures established by the operator and referred to in paragraph (1).

(3) Unless specifically authorised by the Director, no national air operator shall allow a helicopter to be refuelled or defuelled when

(a) passengers are embarking or disembarking; or

(b) the aircraft engine is running or the rotors are turning.

191. (1) No person shall operate an aircraft unless there are available during the take-off, en route flight, and landing

(a) an approved seat or berth for each person on board the aircraft who has reached his second birthday; and

(b) an approved seat belt for separate use by each person on board the aircraft who has reached his second birthday, except that two persons occupying a berth may share one approved safety belt and two persons occupying a multiple lounge or divan seat may share one approved safety belt during en route flight only.

(2) Except as provided in this paragraph, each person on board an aircraft operated under this Part shall occupy an approved seat or berth with a separate safety belt properly secured about him during movement on the surface, take-off, and landing.

(3) A safety belt provided for the occupant of a seat may not be used by more than one person who has reached his or her second birthday.

(4) Notwithstanding paragraphs (2) and (3), a child may

(a) be held by an adult who is occupying an approved seat or berth, provided the child has not reached his second birthday; or

(b) occupy a child restraint system acceptable to the Director, furnished by the operator or by the parent, guardian, or attendant designated by the child's parent or guardian to attend to the safety of the child during the flight.

(5) This Regulation does not prohibit the operator from providing child restraint systems consistent with safe operating practices and acceptable to the Director, or determining the most appropriate passenger seat location for use of the child restraint system.

(6) A passenger shall have his seatbelt securely fastened at any other time the pilot in command determines it is necessary for safety.

(7) When cabin crew are required in a commercial air transport operation, the pilot in command may delegate his responsibilities under this Regulation.

(8) Notwithstanding paragraph (7) a pilot in command shall ascertain that the proper briefing in respect on the use of the seat belt has been conducted prior to take-off.

(9) The pilot in command 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 aircraft shall be secured in their seats by means of the seat belt or harnesses provided.

192. (1) An operator shall establish procedures in his operations manual to ensure that passengers

(a) are given a verbal briefing about safety matters; and

(b) are provided with a safety briefing card containing instructions which shall indicate the operation of emergency equipment and exits likely to be used by passengers.

(2) A pilot in command shall ensure that before take-off

(a) passengers are briefed on the following items where applicable:

(i) smoking regulations;

(ii) back of the seat to be in the upright position and tray table stowed;

(iii) location of emergency exits;

(iv) location and use of floor proximity escape path markings;

(v) stowage of hand baggage;

(vi) restrictions on the use of portable electronic devices; and

(vii) the location and the contents of the safety briefing card;

(b) passengers receive a demonstration on the following:

(i) the use of safety belts and safety harnesses, including how to fasten and unfasten the safety belts and safety harnesses;

(ii) the location and use of oxygen equipment where required; and

(c) the location and use of life jackets where required.

(3) A pilot in command shall ensure that after take-off of an aircraft passengers are reminded of the following:

(a) smoking regulations; and

(b) use of safety belts and safety harnesses.

(4) A pilot in command shall ensure that before landing passengers are reminded of the following:

(a) smoking regulations;

(b) use of safety belts and safety harnesses;

(c) back of the seat to be in the upright position and tray table stowed;

(d) re-stowage of hand baggage; and

(e) restrictions on the use of portable electronic devices.

(5) A pilot in command shall ensure that after landing passengers are reminded of the following:

(a) smoking regulations; and

(b) use of safety belts and safety harnesses.

(6) A pilot in command shall ensure that in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.

193. In an emergency during flight, the pilot in command shall ensure that all persons on board are instructed in such emergency action as may be appropriate to the circumstances.

194. (1) The pilot in command shall ensure that breathing oxygen and masks are available to passengers in sufficient quantities for all flights at such altitudes where a lack of oxygen might harmfully affect passengers.

(2) The pilot in command shall ensure that the minimum supply of oxygen prescribed by the Director is on board the aircraft.

(3) The pilot in command shall require all passengers to use oxygen continuously at cabin pressure altitudes above 15 000 feet.

195. Notwithstanding regulation 189(7), a person who is under medication and is a medical patient under proper care may be allowed to enter in or be on an aircraft where the operator is satisfied that the safety of the aircraft and its occupants is not likely to be endangered.

196. An operator shall take all reasonable measures to ensure that a passenger is not in any part of an aircraft in flight which is not a part designated for accommodation of passengers unless temporary access has been granted by the pilot in command:

(a) for the purpose of taking action necessary for the safety of the aircraft or of any person, animal or goods therein; or

(b) to an area which cargo or stores are carried being a part which is designed to enable a person to have access thereto while the aircraft is in flight.

197. Notwithstanding the generality of the foregoing regulations of this Part regulations 198 to 219 apply to commercial air transport operations.

198. A person on a commercial air transport flight shall comply with instructions given by a crew member in compliance with this Part.

Requirement to comply with instructions given by crew members.

199. (1) No national air operator shall refuse transportation of any person where he has established procedures for the carriage of persons who may require the assistance of another person to move expeditiously to an exit in the event of an emergency.

Denial of transportation of certain categories of passengers in commercial air transport operations.

(2) Notwithstanding paragraph (1), a national air operator may deny transportation of a person where such person

(a) refuses to comply with the instructions regarding exit seating restrictions prescribed by the Director; or

(b) has a handicap that can be physically accommodated only by an exit row seat.

200. No passenger carrying requirements for

Exemptions of certain passenger carrying requirements. S.I. 2007 No.

(a) megaphones as specified in the *Civil Aviation (Instruments and Equipment) Regulations, 2007*;

(b) passenger briefing as specified in regulations 214 and 215;

(c) locking of cockpit compartment door in regulation 58,

shall apply in commercial air transport operations where an aircraft is carrying only

(i) a crew member not required for the flight;

(ii) a representative of the Director on official duty;

(iii) a person necessary to the safety or security of cargo or animals; or

(iv) any person authorised by the operations manual of the national air operator, as approved by the Director.

Cabin crew at duty stations.

201. (1) During take-off and landing and whenever the pilot in command so directs, cabin crew shall remain at their duty stations with safety belts and shoulder harnesses fastened except to perform duties related to the safety of the aircraft and its occupants.

(2) During take-off and landing, cabin crew shall be located as near as practicable to required floor level exits and shall be uniformly distributed throughout the aircraft to provide the most effective egress of passengers in event of an emergency evacuation.

(3) Where passengers are on board a parked aircraft, cabin crew or another person qualified in emergency evacuation procedures for the aircraft, shall be placed in the following manner:

(a) where only one qualified person is required, that person shall be located in accordance with the operations manual procedures of the national air operator;

(b) where more than one qualified person is required, those persons shall be spaced throughout the cabin to provide the most effective assistance for the evacuation in case of an emergency.

(4) An air operator shall ensure that crew members who are not required flight or cabin crew members, have also been trained in, and are proficient to perform, their assigned duties.

Pilot in command to ensure emergency exit is available.

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

(2) A national air operator shall establish for approval by the Director, the necessary functions to be performed by the crew members in an

emergency or a situation requiring emergency evacuation for each type of aircraft.

Prohibition in respect of armed emergency exit.

203. No person shall cause an aircraft carrying passengers to

(a) be moved on the surface;

(b) take-off; or

(c) land unless each automatically deployable emergency evacuation assisting means installed on the aircraft, is armed and ready for evacuation.

Prohibition on blocking access to emergency exit.

204. (1) An air operator shall ensure that carry-on baggage or other items do not block access to the emergency exits when the aircraft is moving on the surface, during take-off or landing or while passengers remain on board.

(2) A pilot in command of an aircraft shall ensure that relevant emergency equipment remains easily accessible for immediate use.

Pilot in command or senior cabin crew to ensure safety procedures complied with.

205. (1) At stops where passengers remain on board an aircraft, the pilot in command of such aircraft, the senior cabin crew or both shall ensure that

(a) all engines are shut down;

(b) at least one floor level exit remains open to provide for the disembarking of passengers; and

(c) there is at least one person immediately available who is qualified in the emergency evacuation of the aircraft and who has been identified to the passengers on board as responsible for the passenger safety.

(2) Where refuelling with passengers on board an aircraft is undertaken, the pilot in command or a designated company representative

shall ensure that the requirements specified in regulation 190 and the operations manual procedures are followed.

Requirements for passengers with reduced mobility.

206. (1) A national air operator shall establish procedures for the carriage of persons with reduced mobility.

(2) A national air operator shall ensure that persons with reduced mobility do not occupy seats where their presence could

(a) impede the crew in their duties;

(b) obstruct access to emergency equipment; or

(c) impede the emergency evacuation of the aircraft.

(3) The pilot in command of an aircraft shall be notified when persons with reduced mobility are to be carried on board.

Transport of inadmissible passengers, deportees or persons in custody.

207. (1) A national air operator shall establish procedures for the transportation of inadmissible passengers, deportees or persons in custody to ensure the safety of the aircraft and its occupants.

(2) The pilot in command of an aircraft shall be notified when the persons referred to in paragraph (1), are to be carried on board.

Passenger requirements for exit row seating.

208. A pilot in command or senior cabin crew of an aircraft shall not allow a passenger to sit in an emergency exit row where the pilot in command or senior cabin crew determines that it is likely that the passenger would be unable to understand and perform the functions necessary to open an exit and to exit rapidly.

Restriction on carriage of weapons.

209. (1) No person shall while on board an aircraft, carry on or about his person a firearm, weapon or munitions of war, either concealed or unconcealed.

(2) This Regulation shall not apply to an air marshal authorised to be on board an aircraft in accordance with the *Civil Aviation (Aviation Security) Regulations, 2007*.

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210. (1) A national air operator may allow a passenger to carry and operate equipment for the storage, generation or dispensing of medical oxygen on an aircraft under conditions as prescribed by the Director.

Requirements for oxygen for medical use by passengers.

(2) A national air operator shall ensure that a person is not allowed to connect or disconnect oxygen-dispensing equipment to or from an oxygen cylinder while any other passenger is aboard an aircraft engaged in commercial air transport.

211. (1) No air operator shall allow the boarding of carry-on baggage unless it can be stowed and secured in an approved location in accordance with the operations manual procedures of the air operator.

Restrictions on carry-on baggage.

(2) No air operator shall allow aircraft passenger entry doors to be closed in preparation for taxi or pushback unless at least one required crew member has verified that each article of baggage has been properly stowed in overhead racks with approved restraining devices or doors, or in approved locations of the bulkhead.

(3) No air operator shall allow carry-on baggage to be stowed in a location that would cause such location to be loaded beyond its maximum placard weight limitation.

212. No national air operator shall allow the carriage of cargo in the passenger compartment of an aircraft except under conditions approved by the Director.

Carriage of cargo in passenger compartment.

213. (1) The pilot in command shall ensure that no person on board an aircraft is allowed to smoke.

Prohibition on smoking on aircraft.

(2) In those areas in the cabin where oxygen is being supplied, the pilot in command shall ensure that required passenger information signs are lit.

Briefing of passengers prior to take-off in commercial air transport operations.

214. (1) No pilot in command of an aircraft shall commence a take-off unless the passengers are briefed prior to take-off in accordance with the procedures of the operations manual of the national air operator on

(a) smoking limitations and prohibitions;

(b) emergency exit location and use;

(c) use of safety belts;

(d) location and use of emergency floatation equipment;

(e) placement of seat backs and tray tables;

(f) the normal and emergency use of oxygen where flight is above12 000 feet above mean sea level; and

(g) the passenger briefing card.

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

(3) A passenger briefing card required by this Regulation shall contain information that is pertinent only to the type and model aircraft used for that flight.

(4) The pilot in command or senior cabin crew shall before each take-off, ensure that any persons of reduced mobility is personally briefed on

(a) the route to the most appropriate exit; and

(b) the time to begin moving to the exit in event of an emergency.

(5) A pilot in command under this Regulation may delegate his briefing responsibility to the senior cabin crew where cabin crew are required.

(6) Notwithstanding paragraph (4), a pilot in command shall

ascertain that the proper briefing required by this Regulation has been conducted prior to take-off.

Briefing specific to over water operations.

215. (1) An air operator shall establish procedures for the briefing of passengers when conducting extended over water operations.

(2) A pilot in command of an aircraft shall not commence extended over water operations unless all passengers have been briefed on the location of life rafts where applicable and location and operation of life vests and other floatation equipment including a demonstration of the method of donning and inflating.

Required passenger seat belts and information signs in commercial air transport operations.

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

(2) A passenger on board an aircraft occupying a seat or berth shall fasten his safety belt and keep it fastened while the "Fasten Seat Belt" sign is lit or, in aircraft not equipped with such a sign, whenever instructed by the pilot in command.

(3) At each unoccupied seat under this Regulation, the safety belt and shoulder harness, where installed, shall be secured so as not to interfere with a crew member in the performance of his duties or with the rapid egress of occupants in an emergency.

Requirements for seat backs to be upright prior to take-off and landing.

217. (1) No pilot in command of an aircraft shall take-off or land an aircraft unless each passenger seat back is in the upright position.

(2) The senior cabin crew of an aircraft engaged in commercial air transport operations shall ensure that prior to take-off or landing each passenger seat back is in the upright position.

Restrictions of movement in respect of stowage of food and beverage.

218. (1) No pilot in command shall

(a) operate an aircraft in movement on the surface;

(b) take-off; or

(c) land an aircraft,

(i) when any food, beverage or tableware is located at any passenger seat;

(ii) unless each food and beverage tray and seat back tray table is in the stowed position;

(iii) unless each passenger serving cart is secured in its stowed position; and

(iv) unless each movie screen that extends into an aisle is stowed.

(2) A senior cabin crew shall ensure that while an aircraft is in movement on the surface, is taking off or landing is

(a) food, beverage or tableware is not located at any passenger seat;

(b) each food and beverage tray and seat back tray table is in the stowed position;

(c) each passenger serving cart is secured in its stowed position; and

(d) each movie screen that extends into an aisle is stowed.

Requirements to secure items of mass in passenger compartment.

219. A national air operator shall ensure that prior to the take-off or landing of an aircraft 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.

PART X

Crew Member and Flight Operations Officer Qualifications for Commercial Air Transport

Applicability of this Part.

220. Notwithstanding the generality of Part X of these Regulations the provisions of this Part shall apply to the conduct of commercial air transport operations.

Age and special medical certificate restriction.

221. (1) No person shall serve nor shall any national air operator use a person as pilot in command of an aircraft engaged international commercial air transport operations where such person has reached his 60th birthday or, in the case of operations with more than one pilot where the other pilot is younger than 60 years of age, his 65th birthday.

(2) No person shall serve nor shall any national air operator use a person as co-pilot of an aircraft engaged in international commercial air transport operations where such person has reached his 65th birthday.

(3) A check airman who has

(a) reached his 60th birthday; or

(b) who does not hold an appropriate medical certificate,

may continue his check airman functions, but may not serve as or occupy the position of a required flight crew member on an aircraft engaged in commercial air transport operations.

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(4) The holder of a special medical certificate issued under the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007* shall not serve as, or occupy the position of a required flight crew member on an aircraft engaged in commercial air transport operations.

(5) Notwithstanding paragraph (4), the holder of a special medical certificate may act as a member of a multi-pilot crew where no other flight crew member:

(a) has attained the age of 60 years, and

(b) is a holder of a special medical certificate.

Pilot in command requirements for turbojet, turbofan or large aircraft. S.I. 2007 No.

222. No pilot shall act as pilot in command of a turbojet, turbofan or large commercial aircraft unless he holds an airline transport pilot licence and a type rating for that aircraft issued in accordance with *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007*.

Pilot in command requirements for non-turbo or turbofan aircraft. S.I. 2007 No.

223. No pilot shall act as pilot in command of a non-turbojet or non-turbofan small aircraft in commercial air transport during

(a) instrument flight rules operations unless he holds a commercial pilot licence with appropriate category and class ratings for the aircraft operated, and an instrument rating and meets the experience requirements for the operation; or

(b) day visual flight rules operations unless he holds a commercial pilot licence with appropriate category and class ratings for the aircraft operated.

Aeronautical experience requirements for pilot in command in respect of small aeroplanes.

224. A national air operator shall ensure that a pilot does not operate as a pilot in command of an aeroplane certificated by the aeroplane flight manual for single pilot operations unless

(a) when conducting passenger carrying operations under visual flight rules, he has a minimum of 500 hours total flight time including at least 100 hours of cross country flight time of which 25 hours were at night on aeroplanes; or

(b) for operations under instrument flight rules holds a valid instrument rating.

225. No pilot shall act as co-pilot of an aircraft in commercial air transport operations unless he holds

Co-pilot licence requirements.

(a) a commercial pilot licence with appropriate category, class and type ratings for the aircraft operated; and

(b) an instrument rating.

226. (1) No person shall act as the flight engineer of a commercial aircraft unless he holds a flight engineer licence with the appropriate class and type rating.

Flight engineer licence requirements.

(2) When a separate flight engineer station is incorporated in the design of an aircraft, the flight crew shall comprise at least one flight engineer unless those duties can, with the approval of the Director, be satisfactorily performed by another flight crew member without interfering with that flight crew member's regular duties.

227. A national air operator shall ensure that, on all flights requiring a flight engineer, there is assigned at least one other flight crew member competent to perform the flight duties in the event the flight engineer becomes incapacitated.

Requirements for flight engineer competency.

228. No person shall act as a flight operations officer in releasing a scheduled passenger-carrying commercial air transport operation unless he has a valid flight operations officer authorisation issued in accordance with the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007*.

Requirements for flight operations officer. S.I. 2007 No.

229. (1) No person shall serve and a national air operator shall not use a person as a crew member or flight operations officer unless that person has completed the company procedures indoctrination training programme approved by the Director, which shall include a complete review of the operations manual procedures pertinent to the crew member or duties of the flight operations officers and other items outlined in the Aircraft Operations Standards.

Crew member or flight operations officer to complete company procedures indoctrination.

(2) A national air operator shall provide a minimum of 40 programmed hours of instruction for company procedures indoctrination training unless a reduction in the number of programmed hours is approved by the Director.

Requirement for initial dangerous goods training.

230. No person shall serve and a national air operator shall not use a person as a crew member unless he has completed the appropriate initial dangerous goods training programme approved by the Director and described in the Technical Instructions.

Initial security training.

231. No person shall serve and a national air operator shall not use a person as a crew member unless such person has completed the initial security training programme approved by the Director.

Requirement for initial crew resource training.

232. (1) No person shall serve and a national air operator shall not use a person as a crew member or flight operations officer in commercial air transport operations unless that person has completed the initial crew resource management training programme which includes:

(a) proper flight crew co-ordination and incapacitation procedures;

(b) effective flight crew and cabin crew co-ordination; and

(c) knowledge about human performance relating to passenger cabin safety duties, as approved by the Director.

(2) The crew resource management training programme under paragraph (1), shall meet the requirements of the Aircraft Operations Standards.

Initial emergency equipment drills.

233. (1) No person shall serve and a national air operator shall not use a person as a crew member unless that person has satisfactorily completed the appropriate initial emergency and life saving equipment drills for the crew member position as approved by the Director for the emergency equipment available on the aircraft to be operated, including

(a) life vests;

(b) life rafts;

(c) evacuation slides;

(d) emergency exits, portable fire extinguishers;

(e) oxygen equipment and first aid kits.

(2) The emergency and life saving equipment drills referred to in paragraph (1), shall meet the requirements set out in the Aircraft Operations Standards.

Required initial aircraft ground training.

234. (1) No person shall serve and a national air operator shall not use a person as a crew member unless that person has satisfactorily completed the initial ground training approved by the Director for the aircraft type.

(2) Initial aircraft ground training under this Regulation for flight crew members

(a) shall include the pertinent portions of the operations manuals relating to aircraft-specific performance, mass and balance, operational policies, systems, limitations, normal, abnormal and emergency procedures on the aircraft type to be used; and

(b) shall 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.

(3) A national air operator may have separate initial aircraft ground training programmes of varying lengths and subject emphasis approved by the Director, which recognize the experience levels of flight crew members.

(4) Initial aircraft ground training under this Regulation for cabin crew shall

(a) include the pertinent portions of the approved operations manuals relating to specific aircraft configuration, equipment, including those used in emergencies and normal and emergency procedures for the aircraft types within the fleet;

(b) ensure each person is competent to execute those safety duties and functions which the cabin crew member is assigned to perform in the event of an emergency or in a situation requiring emergency evacuation;

(c) when serving on aircraft operated above 10 000 feet, include knowledge on the effect of lack of oxygen and, in the case of pressurized aircraft, physiological phenomena accompanying a loss of pressurization;

(d) include awareness of other crew members assignments and functions in the event of an emergency so far as is necessary for the fulfilment of the duties of the crew member.

(5) Aircraft initial ground training for flight operations officers shall include the pertinent portions of the operations manuals relating to specific aircraft flight preparation procedures, performance, mass and balance systems, limitations specific to the aircraft types operated.

(6) The syllabi for initial aircraft ground training under this regulation is set out in the Aircraft Operations Standards.

235. (1) No person shall serve nor shall any national air operator use a person as a flight crew member unless he has completed the initial flight training approved by the Director for the aircraft type, which ensures that all flight crew members are trained to perform their assigned duties.

(2) Initial flight training shall focus on the manoeuvring and safe operation of the aircraft in accordance with normal, abnormal and emergency procedures of the national air operator.

(3) A national air operator may have separate initial flight training programmes which recognize the experience levels of flight crew members approved by the Director.

(4) The initial aircraft flight training under this Regulation shall meet the requirements of the Aircraft Operations Standards.

236. (1) No person shall serve and a national air operator shall not use a person as a flight crew member in commercial air transport operations unless he has completed the appropriate initial specialized operations training programme approved by the Director.

(2) Specialized operations referred to in paragraph (1), for which initial training curricula shall be developed include

(a) low minimums operations, including low visibility take-offs and Category II and III operations;

(b) extended range operations;

(c) specialized navigation; and

(d) pilot in command right seat qualification.

(3) Notwithstanding the generality of paragraph (2), the initial specialized operations training under this Regulation shall meet the requirements of the Aircraft Operations Standards.

237. (1) A national air operator shall ensure that a flight crew member completes

(a) differences training which requires additional knowledge and training on 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 or procedures on types or variants currently operated;

(b) familiarization training which requires the acquisition of additional knowledge when

(i) operating another aircraft of the same type; or

(ii) changing equipment or procedures on types or variants currently operated.

(2) A national air operator shall specify in his operations manual when differences training or familiarization training referred to in paragraph (1), is required.

238. A national air operator shall ensure that an aircraft simulator and other training device used for flight crew qualification shall

(a) be specifically approved by the Director for

(i) the national air operator;

(ii) the type aircraft, including type variations, for which the training or check is being conducted; and

(iii) the particular manoeuvre, procedure, and 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; and

(e) have a daily discrepancy log.

239. (1) A national air operator shall ensure that

(a) flight crew complete a type rating course which satisfies the applicable requirements of the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007* when changing from one type of aircraft to another type or class for which a new type or class rating is required;

(b) flight crew complete the approved conversion course before commencing unsupervised line flying when

(i) changing to an aircraft for which a type or class rating is required; or

(ii) changing national air operators;

(c) conversion training acceptable to the Director is conducted by a suitably qualified person in accordance with a detailed course syllabus included in the operations manual;

(i) as a cabin crew member; or

(ii) another aircraft type; and

(b) differences training which shall be completed before operating

(i) on a variant of an aircraft type currently operated; or

(ii) with different safety equipment, safety equipment location, or normal and emergency procedures on currently operated aircraft types or variants.

(5) A national air operator shall ensure that

(a) conversion training is conducted in a structured and realistic manner;

(b) differences training is conducted in a structured manner; and

(c) conversion training and where necessary differences training, include the use of all safety equipment and all normal and emergency procedures applicable to the type and variant of aircraft, and involves training and practice on either an approved training device or on the actual aircraft.

(6) A national air operator in determining the content of the conversion or differences training referred to in paragraph (3), shall take account of the previous training of the cabin crew member, recorded in his training records.

(7) Conversion and differences training programmes shall be approved by the Director.

(8) A conversion and differences training programme under this regulation shall meet the requirements of the Aircraft Operations Standards.

240. (1) No person shall serve and a national air operator shall not use a person as a pilot flight crew member unless, since the beginning of the 6th calendar month before such service, that person has passed the proficiency check prescribed by Director in the make and model of aircraft on which his services are required.

(2) No person shall serve and a national air operator shall not use a person as a pilot under instrument flight rules operations unless, since the beginning of the 12th month before that service, that person has passed the instrument proficiency check prescribed by the Director.

(3) The proficiency check referred to in paragraph (2), shall ensure that the piloting technique and the ability to execute emergency procedures are checked in such a way so as to assess the competency of the pilot.

(4) A pilot may complete the requirements of paragraphs (1) and (2) simultaneously in a specific aircraft type.

(5) The proficiency check referred to in paragraph (1) shall be in the areas set out in the Aircraft Operations Standards.

241. (1) A national air operator shall ensure that for a pilot to be upgraded from co-pilot to pilot in command and for those joining as pilot in command

(a) a minimum level of experience, acceptable to the Director, is specified in the operations manual; and

(b) for multi-crew operations, the pilot completes a command course acceptable to the Director.

(2) The command course required by paragraph (1)*(b)*, shall be specified in the operations manual and include at least the following:

(a) training in flight simulator including line orientated flying training and flying training;

(b) an operator proficiency check for operations as pilot in command;

(c) responsibilities of the pilot in command;

(d) line training under supervision as a pilot in command for a minimum of 10 sectors for pilots already qualified on the aircraft type;

(e) completion of a pilot in command line check and route and airport qualification check; and

(f) elements of crew resource management training programme referred to in regulations 232 and 239, respectively.

242. (1) A national air operator shall ensure that a pilot who may be assigned to operate in either pilot's seat prior to such assignment completes the appropriate training and checking programme specified in the operations manual of the national air operator.

(2) In developing the training and checking programmes under paragraph (1), the national air operator shall take into consideration the matters set out in the Aircraft Operations Standards.

243. (1) In addition to meeting all applicable training and checking requirements of these Regulations, a required pilot flight crew member who, in the preceding 90 days has not made at least 3 take-offs and landings in the type of aircraft in which he is to serve, shall, under the supervision of a check airman, re-establish recency of experience by making at least 3 take-offs and landings in the type of aircraft on which such person is to serve or in a flight simulator.

(2) When using a flight simulator to accomplish any of the take-off and landing training requirements necessary to re-establish recency of experience, flight crew position shall be occupied by an appropriately qualified pilot and the flight simulator shall be operated as if in a normal in-flight environment without use of the repositioning features of the flight simulator.

(3) A check airman who observes the take-offs and landings of a pilot flight crew member shall certify that the person being observed is proficient and qualified to perform flight duty in line flight operations.

(4) The 90 days prescribed in paragraph (1), may be extended up to a maximum of 120 days where the pilot completes line flying under supervision of Flight Instructor or check airman.

(5) For a period in excess of 120 days referred to in paragraph (4), the recency requirement shall be satisfied by a training flight in a Flight Simulator or aircraft of the type to be used.

244. (1) A national air operator shall ensure that a flight crew member does not operate more that one type or variant of aircraft unless he is competent to do so and has been approved by the Director to so conduct.

(2) When considering operations of more than one type or variant of aircraft, a national air operator shall ensure that the differences and similarities of the aircraft concerned, justify such operations, taking into account the following:

(a) the level of technology;

(b) operational procedures; and

(c) handling characteristics.

(3) A national air operator shall ensure that a flight crew member operating more than one type or variant complies with all the requirements prescribed by the Act or regulations made thereunder for each type or variant of aircraft unless the Director has approved the use of credit related to the training, checking and recency requirements.

(4) A national air operator shall specify in his operations manual appropriate procedures and operational restrictions, approved by the Director, for any operation on more than one type or variant covering

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

(b) the process by which flight crew qualified on one type or variant of aircraft shall be trained and qualified on another type or variant of aircraft ; and

(c) all applicable recency experience requirements for each type or variant of aircraft.

245. A national air operator shall ensure that where a flight crew member is qualified to operate both helicopters and aeroplanes

(a) his operation of such helicopters and aeroplanes are limited to one type of each;

(b) appropriate procedures and operational restrictions, approved by the Director, are specified in the operations manual of the national air operator.

246. (1) A national air operator shall maintain records of

(a) all training and checking undertaken by; and

(b) qualifications of,

all flight and cabin crew members and flight operations officers which meet the requirements of the Act and regulations made thereunder.

(2) Records referred to in paragraph (1), shall be made available to the relevant crew member or flight operations officer upon request.

247. (1) Where a co-pilot has fewer than 100 hours of flight time in the aircraft type being flown in commercial air transport operations, and the pilot in command is not an appropriately qualified check airman, the pilot in command shall make all take-offs and landings in situations designated as critical by the Director.

(2) No pilot in command or co-pilot shall conduct commercial air transport operations in a particular type aircraft in commercial air transport operations unless either pilot has at least 75 hours of line operating flight time, either as pilot in command or co-pilot.

(3) Where a national air operator wishes to deviate from paragraph (2), he shall follow the deviation procedures set out in the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007*.

(4) Notwithstanding the 60 days notification requirement under the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007*, where the Director is in receipt of an application for a deviation certificate which requires the immediate implementation of the deviation, and where he is satisfied that such deviation would not affect the

safety of flight, he may authorise a deviation from paragraph (2), by an appropriate amendment to the operations specifications.

248. (1) No person shall serve and a national air operator shall ensure that a person does not serve as a flight engineer on an aircraft unless within the preceding 6 calendar months he has

(a) successfully completed a proficiency check in accordance with the requirements prescribed by the Director; or

(b) recorded 50 hours flight time for the national air operator as flight engineer in the type aircraft.

(2) The proficiency check required by this Regulation shall include an examination of the procedures listed in the Aircraft Operations Standards.

249. (1) No person shall serve and a national air operator shall not use a person as a cabin crew unless, since the beginning of the 12th calendar month before such service, that person has passed the competency check prescribed by the Director performing the emergency duties appropriate to the assignment of such person.

(2) A national air operator shall ensure that during or following completion of the required training, each cabin crew member undergoes a competency check covering the training received in order to verify proficiency in carrying out normal and emergency duties.

(3) Competency checks under this Regulation shall be performed by cabin crew instructors acceptable to the Director.

(4) A national air operator shall ensure that each cabin crew member undergoes checks for initial conversion, differences and recurrent training.

(5) The competency check under this Regulation shall test the cabin crew knowledge in the areas set out in the Aircraft Operations Standards.

250. (1) No person shall serve and a national air operator shall not use a person as a flight operations officer unless, since the beginning of the twelfth calendar month before such service, that person has passed the competency check, prescribed by the Director, performing the flight preparation and supervision appropriate to the assignment of that person.

(2) The competency check referred to in paragraph (1) shall be

(a) performed by a suitably qualified flight operations instructor acceptable to the Director; and

(b) test the flight operations officer on the areas specified in the Aircraft Operations Standards.

251. (1) A pilot initially qualifying as pilot in command shall operate a minimum of 10 sectors performing the duties of pilot in command under the supervision of a check airman.

(2) A pilot in command transitioning to a new aircraft type shall complete a minimum of 5 sectors performing the duties of a pilot in command under the supervision of a check airman.

(3) A pilot qualifying for duties other than pilot in command shall complete a minimum of 5 sectors performing those duties under the supervision of a check airman.

(4) During the time that a qualifying pilot in command is acquiring operating experience, a check airman who is also serving as the pilot in command shall occupy a pilot seat.

(5) In the case of pilot transitioning to pilot in command, a check airman serving as pilot in command shall occupy the observer's seat where

(a) the transitioning pilot has made at least 2 take-offs and landings in the aircraft type used; and

(b) has satisfactorily demonstrated to the check airman that he is qualified to perform the duties of a pilot in command for that aircraft type.

252. A person qualifying as a flight engineer for a particular aircraft type shall perform in that capacity for a minimum of 5 flights under the supervision of a check airman.

253. (1) A person qualifying as a cabin crew shall perform in that capacity for a minimum of 2 sectors under the supervision of a senior cabin crew.

(2) In qualifying as a cabin crew referred to in paragraph (1), the areas of operations required for supervised line experience are set out in the Aircraft Operations Standards.

254. A national air operator shall ensure that cabin crew

(a) upon completion of conversion training; and

(b) prior to operating as one of the minimum number of the required cabin crew, undergo aircraft familiarization training.

255. No person shall serve and a national air operator shall not use a person as a flight operations officer unless, since the beginning of the 12th month before such service, that person has observed, in the cockpit, the conduct of a one way flight over routes representative of those for which that person is assigned duties.

256. (1) No air operator shall utilize a pilot as pilot in command of an aircraft on a route segment for which that pilot is not currently qualified until that pilot has complied with this Regulation.

(2) A pilot referred to in paragraph (1), shall demonstrate to the national air operator an adequate knowledge of

(a) the route to be flown and the airports which are to be used, including

(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; and

(b) procedures applicable to

(i) flight paths over heavily populated areas and areas of high air traffic density;

(ii) obstructions;

(iii) physical layout;

(iv) lighting;

(v) approach aids;

(vi) arrival, departure, holding and instrument approach procedures; and

(vii) applicable operating minima.

(3) Where a pilot in command has not made an actual approach into an airport, an initial approach to such airport by that pilot in command must be made with a pilot who is qualified for that airport, as a member of the flight crew or as an observer on the cockpit.

(4) The provisions of paragraph (3), in respect of the presence of a pilot who is qualified for the airport shall not apply where:

(a) the approach to the airport is not over difficult terrain and the instrument approach procedures and aids available are similar to those with which the pilot is familiar;

(b) a margin to be approved by the Director is added to the normal operating minima;

(c) there is reasonable certainty that approach and landing can be made in visual meteorological conditions;

(d) the descent from the initial approach altitude can be made by day in visual meteorological conditions;

(e) the national air operator qualifies the pilot in command to land at the airport concerned by means of adequate pilot in command pictorial presentation;

(f) the airport concerned is adjacent to another airport at which the pilot in command is currently qualified to land.

(5) No national air operator shall continue to utilize a pilot in command on a route unless, within the preceding 12 months, that pilot has made at least one trip between the terminal points of that route as a pilot member of the flight crew, as a check airman, or as an observer in the cockpit.

(6) Where a pilot has not within the preceding 12 months made a trip on a route referred to in paragraph (5), or on a route in close proximity and over similar terrain, he shall before serving as a pilot in command on those routes meet the requirement of this Regulation.

(7) In addition to the records required under this Regulation, a national air operator shall maintain a record acceptable to the Director, of the qualification of the pilot in command and of the manner in which that qualification has been achieved for satisfying the requirements of this Regulation.

257. (1) No person shall serve and a national air operator shall not use a person as a pilot in commercial air transport operations unless, within the preceding 12 months, that person has passed a route check in which he satisfactorily performed his assigned duties in one of the types of aeroplanes he is to fly.

(2) No person shall perform pilot in command duties in commercial air transport operations

(a) over a designated special operational area that requires a special navigation system or procedure; or

(b) in extended range twin engine operations, unless his competency with the systems and procedures has been demonstrated to the national air operator within the preceding 12 months.

(3) A pilot in command shall demonstrate special operational competency by navigation over the route or area as a pilot in command under the supervision of a check airman and on a continuing basis, on flights while performing duties as a pilot in command.

258. (1) A national air operator shall ensure that when planning for an instrument approach where the ceiling may be less than 300 feet and the visibility may be less than one nautical mile, the pilot in command assigned on the flight has prior to flight performed 15 sectors performing pilot in command duties in the aircraft type which shall include 5 approaches to land using Category I or Category II procedures.

(2) No pilot in command shall plan for or initiate an instrument approach when the ceiling is less than 300 feet and the visibility is less than one nautical mile unless he has, prior to such flight completed 15 sectors

performing the duties of pilot in command in the aircraft type which included 5 approaches to land using Category I or Category II procedures.

(3) A national air operator shall ensure that where planning for approach when the ceiling may be less than 100 feet or the visibility may be less than 1 200 runway visual range, the pilot in command assigned to the flight has prior to flight completed 20 sectors performing pilot in command duties in the aircraft type which shall include 5 approaches to land using Category III procedures.

(4) No pilot in command shall plan for or initiate an approach when the ceiling is less than 100 feet or the visibility is less than 1 200 runway visual range unless he has prior to such flight completed 20 sectors performing pilot in command duties in the aircraft type, which included completing 5 approaches and landings using Category III procedures.

259. (1) No person shall serve nor shall any national air operator use a person as pilot in command in commercial air transport operations at designated special airports and heliports unless within the preceding 12 months

(a) the pilot in command has received a briefing from the national air operator on such operations for that airport, through pictorial means acceptable to the Director; or

(b) the pilot in command or the assigned second in command has made a take-off and landing at that airport while serving as a flight crew member for the national air operator.

(2) Designated special airport and heliport limitations under paragraph (1), are not applicable where the operation will occur

(a) during daylight hours;

(b) when the visibility is at least 3 nautical miles; and

(c) when the ceiling at that airport is at least 1 000 feet above the lowest initial approach altitude prescribed for an instrument approach procedure.

260. (1) A national air operator shall ensure that

(a) each flight crew member undergoes recurrent training and checking and that all such training and checking areas relevant to the type or variant of aircraft on which such flight crew member operates;

(b) a recurrent training and checking programme is established in the operations manual of the national air operator, and approved by the Director;

(c) ground and recurrent training are conducted by suitably qualified personnel;

(d) emergency and safety equipment training is conducted by suitably qualified personnel; and

(e) all personnel conducting recurrent training for crew are suitably qualified to integrate the elements of crew resource management into such training;

(f) modular crew resource management training is conducted by at least one crew resource management trainer, acceptable to the Director, who may be assisted by experts in order to address specific specialized areas; and

(g) recurrent checking is conducted as follows:

(i) operator proficiency check shall be conducted by a check airman trained in crew resource management concepts and the assessment of crew resource management skills;

(ii) line check shall be conducted by a suitably qualified pilot in command nominated by the a national air operator and acceptable to the Director; and

(iii) emergency and safety equipment checks shall be conducted by suitably qualified personnel.

(2) A national air operator shall ensure that

(a) flight crew undergo proficiency checks to assess competency in carrying out normal, abnormal and emergency procedures;

(b) the proficiency check referred to in paragraph *(a)* is conducted without external visual reference when the flight crew member will be required to operate under instrument flight rules; and

(c) flight crew undergo proficiency checks as part of a normal flight crew complement.

(3) The period of validity of a proficiency check shall be 6 months in addition to the remainder of the month in which the proficiency check expires.

(4) A proficiency check shall be performed twice within any period of one year and any two such checks which are similar and which occur within a period of 4 consecutive months shall not alone satisfy this requirement.

(5) A national air operator shall ensure that each flight crew member undergoes a line check on the aircraft to demonstrate his competence in carrying out normal line operations as described in the operations manual of the national air operator.

(6) The period of validity of a line check referred to in paragraph (5), shall be the remainder of the month of which such check is issued plus 12 months thereafter.

(7) Where a new line check is issued within the final 3 months of validity of a previous line check, the period of validity of the new line check shall extend from the date of issue until 12 months from the expiry date of the previous line check.

(8) A national air operator shall ensure that each crew member undergoes training and checking on the location and use of all emergency and safety equipment carried.

(9) The period of validity of an emergency and safety equipment check referred to in paragraph (8), shall be the remainder of the month in which the check is issued plus 12 months thereafter.

(10) Where an emergency and safety equipment check is issued within the final 3 months of validity of a previous emergency and safety check, the period of validity of the new emergency and safety equipment check shall extend from the date of issue to 12 months from the expiry date of that previous emergency and safety equipment check.

(11) A national air operator shall ensure that

(a) elements of crew resource management training are integrated in all appropriate phases of the recurrent training;

(b) each flight crew member undergoes specific modular crew resource management training; and

(c) all major topics of crew resource management training shall be covered over a period not exceeding 3 years.

(12) A national air operator shall ensure that each flight crew member undergoes appropriate recurrent training every 12 months.

(13) Where the training referred to in paragraph (11), is conducted within 3 months prior to the expiry of the 12 months period, the next recurrent training shall be completed within 12 months of the original expiry date of the previous ground and recurrent training.

(14) A national air operator shall ensure that each flight crew member undergoes flight training in an aircraft or flight simulator every 12 months.

(15) Where the training referred to in paragraph (12), is conducted within 3 months prior to the expiration of the previous 12 months period, the next flight training shall be completed within 12 months of the original expiration date of the previous flight training.

(16) Recurrent training for flight crew required by this Regulation shall meet the requirements of the Aircraft Operations Standards.

261. (1) A national air operator shall ensure that each cabin crew member undergoes recurrent training and checking covering the actions assigned to each crew member in normal and emergency procedures and drills relevant to the type and variant of aircraft on which he operates.

(2) A national air operator shall ensure that the recurrent training and checking programme is approved by the Director and includes theoretical and practical instructions, together with individual practice.

(3) The period of validity of recurrent training and the associated checking shall be the remainder of the month in which the training occurs plus 12 months thereafter.

(4) Where a new check was issued within the final 3 months of validity of a previous check, the period of validity of the new check shall extend from the date of issue until 12 months from the expiration of that previous check.

(5) A national air operator shall ensure that all recurrent training and checking for cabin crew is conducted by suitably qualified cabin crew.

(6) A cabin crew shall undergo recurrent training and emergency procedures and drills relevant to his assigned positions and type and variant of aircraft on which he operates on the areas and for the intervals set out in the Aircraft Operations Standards.

262. (1) A national air operator shall ensure that each cabin crew member who has been absent from all flying duties for more than 6 months, and still remains within the period of validity of the previous check, completes

recurrent training specified in the operations manual of the national air operator.

(2) A national air operator shall ensure that when a cabin crew member who, during the preceding 6 months had not undertaken duties as a cabin crew member on a particular type of aircraft, before undertaking such duties on that aircraft type such cabin crew member

(a) completes recurrent training on the type; or

(b) operates two re-qualification sectors.

(3) A national air operator shall ensure that recurrent training is conducted by suitably qualified persons and, for each cabin crew member, includes at least the following:

(a) emergency procedures including pilot incapacitation;

(b) evacuation procedures including crowd control techniques;

(c) the operation and actual opening of all normal and emergency exits for passenger evacuation in an aircraft or representative training device;

(d) demonstration of the operation of all other exits including flight deck windows; and

(e) the location and handling of emergency equipment, including oxygen systems, and the donning of life vests, portable oxygen and protective breathing equipment.

263. (1) No person shall serve and a national air operator shall not use a person in commercial air transport operations as a flight operations officer unless within the preceding 12 months that person has completed the recurrent ground training programme approved by the Director.

(2) The recurrent ground training programme referred to in paragraph (1), shall include training on

(a) aircraft-specific flight preparation;

(b) emergency assistance to flight crew;

(c) crew resource management; and

(d) recognition of and transportation of dangerous goods.

(3) A national air operator shall ensure that all recurrent ground training is conducted by a suitably qualified flight operations officer.

264. (1) No person shall serve and a national air operator shall not use a person in commercial air transport operations as a flight instructor unless he

(a) holds a flight instructor rating under the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007*;

(b) meets the following requirements:

(i) holds the pilot licences and rating required to serve as a pilot in command or a flight engineer;

(ii) has satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required in order to serve as a pilot in command or flight engineer;

(iii) has satisfactorily completed the appropriate proficiency, competency and recency of experience checks that are required to serve as a pilot in command or flight engineer;

(iv) has satisfactorily completed the applicable initial or transitional training requirements and the in-flight competency check; and

(v) holds the appropriate medical certificate.

(2) A national air operator shall ensure that a person meeting the requirements of paragraph (1)*(b)* completes the requirements set out in the Aircraft Operations Standards.

265. No national air operator shall use a person nor may any person serve as a flight instructor in an approved training program unless, with respect to the aircraft type involved, that person

(a) has satisfactorily completed

(i) the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command or flight engineer, as applicable;

(ii) the appropriate proficiency, competency and recency of experience checks that are required to serve as a pilot in command or flight engineer, as applicable;

(iii) the applicable initial or transitional training requirements and the Director has observed in-flight competency check; and

(b) holds the airman licences and rating required to serve as a pilot in command or a flight engineer, as applicable;

(c) holds at least a Class III medical certificate unless serving as a required flight crew member, in which case holds a Class I or a Class II medical certificate as appropriate.

266. (1) No person shall serve and no national air operator shall use a person as a check airman unless he has completed the curricula approved by the Director for those functions for which he is to serve.

(2) A national air operator shall ensure that the initial and transition training for a check airman referred to in paragraph (1) includes the areas set out in the Aircraft Operations Standards.

267. Subject to regulations 268 and 269, a person shall not serve nor may any national air operator use a person as a check airman for any flight check unless that person has been designated by such national air operator and approved by the Director as a check airman for a specific function, within the preceding 12 months.

268. No person shall serve and no national air operator shall use a person as a check airman in an established training programme unless, with respect to the aircraft type involved, that person

(a) has satisfactorily completed

(i) the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command or flight engineer;

(ii) the appropriate proficiency, competency and recency of experience checks that are required to serve as a pilot in command or flight engineer;

(iii) the applicable training requirements and the Director has observed in-flight competency check;

(b) holds the pilot licences and ratings required to serve as a pilot in command or a flight engineer;

(c) holds the appropriate medical certificate; and

(d) has been approved by the Director for the check airman duties involved.

269. No person shall serve nor shall any national air operator use a person as a check airman on commercial air transport operations for any check

(a) in an aircraft as a required pilot flight crew member unless that person holds the required pilot licences and ratings and has completed all applicable training, qualification and currency requirements of these Regulations applicable to the crew position and the flight operations being checked;

(b) in an aircraft as an observer check airman unless that person holds the pilot licences and ratings and has completed all applicable training, qualification and line observation requirements of these Regulations applicable to the position and the flight operations being checked; or

(c) in a flight simulator unless that person has completed or observed all training, qualification and line observation requirements of these Regulations applicable to the position and flight operations being checked.

270. (1) No national air operator shall use a flight simulator for training or checking unless such flight simulator has been specifically approved for the national air operator in writing, by the Director.

(2) A national air operator shall not use a flight simulator for any purpose other than that specified in the approval of the Director.

271. No person shall serve nor shall any national air operator use a person as a check airman or simulator flight instructor in commercial air transport operations unless, since the beginning of the 12th month before that service, that person has

(a) flown at least 5 sectors as a required crew member for the type of aircraft involved; or

(b) observed, on the flight deck, the conduct of 2 complete flights in the aircraft type to which the person is assigned.

272. Where it is necessary to terminate a check for any reason, a national air operator shall not use the crew member or flight operations

officer involved in such check in commercial air transport operations until the completion of a satisfactory re-check.

273. (1) The national air operator shall record in his records for each crew member and flight operations officer, the completion of each of the qualifications required by these Regulations in a manner acceptable to the Director.

(2) A pilot may complete the curricula required by these Regulations concurrently or intermixed with other required curricula, but completion of each curriculum shall be recorded separately in sufficient detail to satisfy the Director.

274. (1) To enable adequate supervision of his training and checking activities, a national air operator shall forward to the Director at least 7 days prior to the scheduled activity, the dates, times and locations of all

(a) training in the training programme of the national air operator which required the approval of the Director; and

(b) proficiency, competency and line checks.

(2) Failure to provide the information required referred to in paragraph (1), may invalidate the training or check and the Director may require that it be repeated for observation purposes.

275. (1) A national air operator may submit a request to the Director in writing for the reduction or waiver of any training requirement or portion thereof, and such request shall be accompanied by a detailed justification.

(2) The Director on receipt of a request referred to in paragraph (1), may authorise the reductions in, or waiver of certain portions of the training requirements of this Part, taking into account the previous experience of the crew members.

(3) Where a request referred to in paragraph (1), is for a specific crew member, the written authorisation, including the supporting justification, shall be filed in the records which the national air operator maintains for that crew member.

PART XI

Crew and Flight Duty Limitations

276. (1) This Part applies in relation to any duty carried out on behalf of a national air operator by both flight crew and cabin crew as applicable.

(2) In this Part

"crew" means flight crew and cabin crew;

"day" means the period of elapsed time using coordinated universal time or local time that begins at midnight and ends 24 hours later at the next midnight;

Responsibilities of national air operator.

"dispatch crew" means a fully qualified crew member authorised to carry out pre-flight duties as defined by the national air operator;

"duty" means any continuous period during which a crew member is required to carry out any task associated with the business of the national air operator;

"minimum rest period" means a period during which a crew member is free from all duties, is not interrupted by the national air operator and is provided with an opportunity to obtain not less than 8 consecutive hours of sleep in suitable accommodation, time to travel to and from that accommodation and time for personal hygiene and meals and where applicable, time to check-in and out of accommodation;

"positioning" means the practice of transferring crew from place to place as passengers in surface or air transport on behalf of the national air operator;

"reporting time" means the time at which a crew member is required by the national air operator to report for any duty;

"reserve duty" means a period during which the national air operator requires a crew member who would otherwise be off duty to be available to assume duty where necessary;

"rest period" means the period of time before starting a flying duty period that is designed to give crew members adequate opportunity to rest before a flight;

"rostered duty" means the duty period or series of duty periods, with stipulated start and finish times, notified by the national air operator to crews in advance;

"scheduled duty" means the allocation of specific flight or flights or other duties to a crew member within the pre-notified rostered series of duty periods;

"sector" means a period of flight time when an aircraft first moves under its own power until it next comes to rest at the designated parking position after landing;

Monitoring system.

"split duty" means flying duty period which consists of two or more sectors separated by period less than a minimum rest period;

"standby crew" means a crew member who has been designated by a national air operator to remain at a specified location in order to be available to report for flight duty on notice of one hour or less;

"suitable accommodation" means a furnished bedroom which is subject to minimum noise, is well ventilated and has the facility to control the levels of light and temperature; and

Flight time limitations.

"travelling" means all time spent by a crew member transiting between the place of rest and the place of reporting for duty and shall not count as duty time.

(3) This Part shall not apply to a flight conducted in an aircraft of which the maximum total weight does not exceed 1 600 kilogrammes and which is not flying for the purposes of commercial air transport or aerial work.

Flight duty limitations and rest periods.

277. (1) No national air operator shall cause or permit an aircraft to make a flight unless

(a) he has established a scheme for the regulation of flight times for every person flying in such aircraft as a member of its crew;

(b) the scheme referred to in paragraph *(a)* is approved by the Director and subject to such conditions as the Director thinks fit;

(c) the scheme referred to in paragraph *(b)* is incorporated in the operations manual of the national air operator;

(d) he has taken steps to ensure that the provisions of the scheme referred to in paragraph *(b)* shall be complied with by every person flying in that aircraft as a member of its crew.

(2) No crew member shall fly, and a national air operator shall not require him to fly where either has reason to believe that such crew member is suffering or likely to suffer while flying, from such fatigue as may endanger the safety of the aircraft or its occupants.

(3) A crew member shall inform the national air operator of all flying undertaken so that the cumulative flight and duty times can be assessed against the limitations contained in these Regulations.

(4) A national air operator shall publish crew rosters in advance to allow operating crews to plan adequate pre-duty rest.

(5) The national air operator and crew members are jointly responsible for the proper control of flight and duty times.

(6) Crew members have the responsibility to make optimum use of the opportunities for rest facilities provided, and for planning and using their rest periods properly in order to minimize the risk of incurring fatigue.

(7) No crew member shall act as a member of an operating crew where he knows or suspects that his physical or mental condition renders him unfit to perform his duties.

278. (1) A national air operator shall establish a system to monitor the flight time, flight duty time and rest periods of each of his crew and shall include in his operations manual the details of such system.

(2) Where a person becomes aware that an assignment by a national air operator to act as a crew member on a flight would result in the maximum flight time referred to in regulation 279 or the maximum flight duty time referred to in regulation 280 being exceeded, the person shall so notify the national air operator.

279. (1) Subject to subsection (2), no national air operator shall assign flight time to a flight crew member and a flight crew member shall not accept such an assignment where at the beginning of the flight, the aggregate of all his previous flight times will, as a result exceed

(a) 100 hours in any 28 consecutive days;

(b) 1 000 hours in any 365 consecutive days; and

(c) 8 hours in any 24 hours where the flight crew member conducts single-pilot consecutive hours instrument flight rules flights or single pilot helicopter flights.

(2) Notwithstanding the requirements outlined in paragraph (1), a national air operator may assign a flight crew member for flight time, and a flight crew member may accept such an assignment, where the increase in flight time is authorised in the national air operator certificate.

(3) Subject to regulation 283, a flight crew member who reaches a flight time limitation established by this Regulation shall not continue on flight duty or be reassigned to flight duty until such time as the flight crew member has had the rest period required by regulation 280(4).

280. (1) Subject to regulations 281 through 283, no national air operator shall assign a crew member for flight duty time, and a crew member shall not accept such an assignment, where the crew member's flight duty time will, as a result, exceed 14 consecutive hours in any 24 consecutive hours.

(2) A crew member shall receive at least 24 consecutive hours free from flight duty following 3 consecutive flight duty time assignments that exceed 12 consecutive hours unless the crew member has received at least 24 consecutive hours free from flight duty between each of the 3 consecutive flight duty time assignments.

(3) Following a flight duty time assignment, a national air operator shall provide a crew member with the minimum rest period and any additional rest period required by these Regulations.

(4) The minimum rest period for crew shall be

(a) at least as long as the preceding duty period; or

Extension of flight duty time by split duty.

(b) such as to allow the crew member to have a minimum of 8 hours of sleep opportunity in suitable accommodation, whichever is greater.

(5) In computing the minimum rest at paragraph (4)*(b)*, the air operator shall take into consideration

(a) expected travel times to and from the rest facility;

(b) hotel check-in and check-out time;

(c) time for personal hygiene and meals, so as to allow 8 consecutive hours of sleep opportunity in suitable accommodation.

(6) Where any of the variables referred to in paragraph (5), is longer than expected or there is a further delay in crews being afforded the required eight hours sleep opportunity, the minimum rest shall be increased accordingly.

Extension of flight duty by crew augmentation.

(7) A pilot in command may, at his discretion, and after taking note of the circumstances of other members of the crew, reduce the rest period referred to in paragraph (4).

(8) The rest period referred to in paragraph (7) shall not be less than 10 hours.

(9) The exercise of his discretion referred to in paragraph (7), by the pilot in command shall be exceptional and shall not be used to reduce successive rest periods.

(10) Where the preceding flight duty period was extended, the rest period may be reduced as set out in paragraph (7), provided that subsequent flight duty period is also reduced by the same amount.

(11) The maximum flight duty hours for cabin crew shall not exceed

(a) 60 hours in one week but may be increased to 65 hours when a rostered duty covering a series of duty periods, once commenced, is subject to unforeseen delays;

(b) 105 hours in any 2 consecutive weeks; or

(c) 210 hours in any 4 consecutive weeks.

(12) Notwithstanding paragraph (1), the flight duty time applicable to cabin crew may be one hour greater than for flight crew.

(13) A national air operator may, where a flight is conducted using an aircraft other than a helicopter, and the number of cabin crew is increased by the addition of at least one qualified cabin crew more than the minimum complement required, extend the flight duty time of such cabin crew on duty to 16 consecutive hours.

(14) A national air operator may, where a flight is conducted using an aircraft other than a helicopter, and the number of cabin crew is increased by the addition of at least 2 qualified cabin crew more than the minimum complement required, extend the flight duty time of such cabin crew on duty to 17 consecutive hours.

Unforeseen operational circum-stances.

281. (1) Where flight duty time includes a rest period, such flight duty time may be extended beyond the maximum flight duty time referred to in regulation 280(1) by $^{1}/_{2}$ the length of the rest period to a maximum of 3 hours, where

(a) the national air operator provides the crew member with advance notice of the extension of flight duty time;

(b) the national air operator provides the crew member with a rest period of at least 4 consecutive hours in suitable accommodation; and

(c) the rest of a crew member is not interrupted by the national air operator during the rest period.

(2) The minimum rest period following flight duty time referred to in regulation 280(1) and prior to the next flight duty time shall be at least as long as the preceding duty period.

282. (1) The national air operator may where a flight is conducted using an aircraft other than a helicopter, and the number of flight crew is increased by the addition of at least one qualified flight crew member, extend the flight duty time to 15 consecutive hours if

(a) the additional flight crew member occupies a flight deck observer seat during take-offs and landings unless the observer seat is required by an inspector, in which case, a passenger seat shall be made available for the flight crew member; and

(b) the subsequent minimum rest period is increased by at least 2 hours.

(2) Where the flight crew complement is increased by the addition of at least one flight crew member and a flight relief facility is provided, the division of duty and rest shall be balanced between the flight crew members.

(3) The flight duty time referred to in paragraph (2), may be extended to

(a) 17 consecutive hours, where the flight relief facility is a seat in which case the maximum flight deck duty time for any flight crew member shall be 12 hours;

Delayed reporting time.

(b) 20 consecutive hours, where the flight relief facility is a bunk in which case the maximum flight deck duty time for any flight crew member shall be 14 hours;

Require-ments for time free from duty.

(c) a maximum of 3 sectors.

(4) The subsequent minimum rest period under this Regulation shall be equal to the length of the preceding flight duty time.

(5) Where a flight crew is increased by the addition of at least one flight crew member in accordance with paragraph (1) or (2), the total flight time accumulated during the flight shall be logged by all flight crew members for the purposes of calculating the maximum flight times in regulation 279.

283. (1) Flights shall be planned to be completed within the maximum flight time and maximum flight duty time taking into account

Positioning time to count as duty time.

(a) the time necessary for pre-flight and post-flight duties;

(b) the sector time or times of the series of sectors comprising the flight;

(c) the forecast weather;

(d) turn-around times; and

(e) the nature of the operation.

(2) The maximum flight duty time referred to in regulation 280(1) may be exceeded by a maximum of 2 hours where

(a) the flight is extended as a result of unforeseen operational circumstances, such as

(i) unforecast weather;

(ii) an equipment malfunction; or

(iii) air traffic control delay, that is beyond the control of the national air operator;

Flight crew members to inform of other times of flying.

(b) the pilot in command, after taking note of the flight and duty time circumstances of the other crew members, considers it safe to exceed the maximum flight time and flight duty time.

(3) When flight duty time is extended

(a) the subsequent minimum rest period for the crew shall be at least as long as the preceding duty period;

(b) the pilot in command shall notify the national air operator, in accordance with procedures outlined in the operations manual of the national air operator, of the length of and the reason for the extension;

(c) the national air operator shall retain the notifications until the completion of the next audit; and

(d) the national air operator shall notify the Director on the appropriate form within 14 days of the return to base of the aircraft.

284. Where a crew member is notified of a delay in reporting time before leaving a rest facility and the delay is in excess of 3 hours, the flight duty time of the crew member is considered to have started 3 hours after the original reporting time.

285. (1) A national air operator shall provide each crew member with time free from duty amounting to one period of at least 36 consecutive hours within each 7 consecutive days or one period of at least 3 consecutive days within each 17 consecutive days.

Requirements for flight crew members on reserve.

(2) Where a crew member is a crew member on reserve, a national air operator shall provide him with time free from duty amounting to one period of at least 36 consecutive hours within each 7 consecutive days or one period of at least 3 consecutive days within each 17 consecutive days.

(3) A national air operator shall notify a flight crew member on reserve of the commencement and duration of his time free from duty.

286. (1) Where crew spend time performing required positioning responsibilities, all time spent on such responsibilities shall count as duty time.

(2) The flight duty period commences at the time at which the crew member reports for the positioning journey.

(3) A flight duty period may include

(a) positioning;

(b) any form of ground duty and standby duty at an airport which preceded flying duty,

and shall be subject to maximum allowable flight duty period limits specified.

(4) Positioning and ground duties immediately following a flying duty shall not be part of the flight duty period, but shall count in computing the length of the subsequent rest period.

(5) The time spent between reporting for a flight and the completion of post flight tasks shall determine the length of the subsequent rest period.

Requirements for flights crossing more than four time zones.

287. (1) A flight crew member shall inform the national air operator and any other employer of his services as a flight crew member, of all flight times and flying duty periods undertaken, whether professionally or privately.

(2) The flight times and flying duty period required to be reported in paragraph (1) shall not include flight in aircraft not exceeding 1 600 kilogrammes maximum weight and not flying for the purpose of commercial air transport operations or aerial work.

Example of flight and duty time schemes for aeroplane and helicopter operations.

(3) Aerial work referred to in paragraph (2) shall include

(a) flying instruction for which the pilot is remunerated; and

(b) where valuable consideration is given specifically for flying instruction.

Applicability of this Part.

(4) A national air operator shall ensure that a pilot employed as a member of a flight crew shall not exceed the flight time limitation prescribed by these Regulations.

Qualified persons required for operational control functions.

(5) A pilot referred to in paragraph (2) shall ensure that his flight time with the national air operator plus any other flight time he accumulates shall not exceed any flight time limitation prescribed by these Regulations.

288. (1) A national air operator shall within each 24 hour period of operations provide crew members on reserve during such 24 hour period, an opportunity to obtain at least 8 consecutive hours sleep.

(2) In reserving crew members for duty a national air operator may

(a) provide the crew member with 24 hours notice of the time of commencement and duration of the rest period to ensure that the designated rest period, is not shifted more than 3 hours earlier or later than the corresponding time of the preceding designated or actual rest period in the preceding 24 hours, nor more than a total of 8 hours in any 7 consecutive days;

(b) provide the crew member a minimum of 10 hours notice of the assignment and shall not assign him to any duty for these 10 hours; or

(c) not assign the crew member to flight duty time or interrupt his rest period between 22:00 and 06:00 local time.

(3) Where a national air operator is unable to provide a crew with a rest period required by paragraph (1), and the crew member between is notified to report for flight duty or the reporting time occurs 22:00 and 06:00 local time

Restrictions on flight operation officer or flight dispatcher.

(a) the maximum flight duty time shall be 10 consecutive hours; and

(b) the subsequent minimum rest period shall be increased by at least $^{1}/_{2}$ half of the length of the preceding flight duty time.

(4) A national air operator shall outline in his operations manual a method for ensuring compliance with these Regulations.

289. (1) A flight or series of flights which terminates more than 4 one-hour time zones from the point of departure, shall be limited to 3 sectors and shall be followed by a rest period that is at least equal to the length of the preceding flight duty period.

(2) Where a flight referred to in paragraph (1), is a transoceanic flight, only one sector may be completed after such transoceanic sector.

(3) An unscheduled technical stop shall not be included in computing the number of sectors for a transoceanic flight.

290. Flight duty time schemes for aeroplane and helicopter operations shall be in the manner set out in the aircraft operations standards, as applicable to the operations.

PART XII

Commercial Air Transport Flight Release

291. This Part prescribes the requirements for a person designated by a national air operator to issue a flight release.

292. (1) A national air operator shall assign a qualified person to exercise the functions and responsibilities for operational control of each flight undertaken by him in commercial air transport.

(2) A national air operator shall ensure that

(a) for passenger-carrying flights conducted on a published schedule, a person holding a flight operations officer authorisation issued in accordance with the *Civil Aviation (General Application and Personnel Licensing) Regulations, 2007* or a person with equivalent qualification shall be on-duty at an operations base to perform the operational control functions; and

Functions and duties of operational control.

(b) for all other flights, the qualified person exercising operational control responsibilities shall be available for consultation prior to, during and immediately following the flight operation.

(3) The pilot in command shall for all flights share the responsibility for operational control of the aircraft and has the authority to make decisions regarding operational control issues in-flight.

(4) Where a decision of the pilot in command differs from that recommended by the flight operations officer or person with equivalent qualification such flight operations officer or person shall make a record of the associated facts.

293. (1) A national air operator shall ensure that a flight operation officer shall not be assigned to duty unless that officer has

(a) made within the preceding 12 months, at least a oneway qualification flight including landings at as many airports as practicable, on the flight deck of an aircraft over any area in which that individual is authorised to exercise flight supervision;

(b) demonstrated to the national air operator adequate knowledge of

(i) the contents of his operations manual;

(ii) the radio equipment in the aircraft used; and

(iii) the navigation equipment in the aircraft used;

(c) demonstrate to the national air operator knowledge of the following details concerning operations for which the officer is responsible and areas in which that individual is authorised to exercise flight supervision:

(i) the seasonal meteorological conditions and the sources of meteorological information;

(ii) the effect of meteorological conditions on radio reception

in the aircraft used;

(iii) the peculiarities and limitations of each navigation system which is used by the national air operator; and

(iv) the aircraft loading instructions;

(d) demonstrate to the national air operator knowledge and skill related to human performance relevant to the duties of a flight operations officer; and

Contents of a flight release or operational flight plan.

(e) demonstrate to the national air operator the ability to perform the duties of a flight operations officer specified in these Regulations.

(2) A national air operator shall ensure that a flight operations officer who is assigned to flight supervision duties maintains complete familiarization with all features of the operations which are pertinent to his duties, including knowledge and skill related to human performance.

(3) A national air operator shall ensure that a flight operations officer is not assigned to duty after 12 consecutive months of absence from such duty unless the appropriate retraining is accomplished.

294. (1) A flight operations officer or person holding the equivalent qualification, in exercising responsibility for operational control for a national air operator shall

(a) authorise the specific flight operation;

(b) ensure that an airworthy aircraft properly equipped for the flight is available;

Require-ments for aircraft flight release.

(c) ensure that qualified personnel and adequate facilities are available to support and conduct the flight;

(d) ensure that proper flight planning and flight preparation is

carried out;

(e) ensure that flight locating and flight following procedures are followed; and

(f) for scheduled, passenger-carrying flights, ensure the monitoring of the progress of the flight and the provision of information that may be necessary to safety.

Required facilities and notices to airmen for flight release.

(2) A national air operator shall ensure that for passenger-carrying flights conducted on a published schedule, the flight operations officer or person holding the equivalent qualification shall

(a) assist the pilot in command in flight preparation and provide the relevant information required;

(b) assist the pilot in command in preparing the operational and air Traffic Control flight plans;

(c) sign the dispatch copy of the flight release;

(d) 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

Weather reports and forecasts required for flight release.

(e) in the event of an emergency, initiate the applicable procedures contained in the operations manual of the national air operator.

(3) A flight operations officer or person holding equivalent qualification performing the operational control duties shall avoid taking any action that would conflict with the procedures established by

Procedures for flight release in icing conditions.

(a) air traffic control;

(b) the meteorological service;

(c) the communications service; or

(d) the national air operator.

295. A national air operator shall ensure that the flight release or operational flight plan when used as a flight release document contains at least the following information concerning each flight:

(a) the company or organisation name;

(b) make, model, and registration number of the aircraft being used;

(c) the flight or trip number, and date of flight;

Flight release under visual flight rules or instrument flight rules.

(d) the name of each crew member;

(e) the departure airport, destination airports, alternates airports and route;

(f) the minimum fuel on board, in imperial or metric measurements;

Required minimum fuel supply for flight release.

(g) a statement of the type of operation such as instrument flight rules or visual flight rules;

(h) the latest available weather reports and forecasts for the destination airport and alternate airports; and

(i) any additional available weather information that the pilot in command considers necessary.

296. (1) A national air operator shall ensure that a flight release for a commercial air transport operation is not issued unless the aircraft is airworthy and properly equipped for the intended flight operation.

Aircraft loading and performance requirement for flight release.

(2) A national air operator shall ensure that a flight release for a commercial air transport operation using an aircraft with inoperative instruments and equipment installed is not issued, except as specified in the minimum equipment list approved for the national air operator for that type aircraft.

297. (1) A national air operator shall ensure that an aircraft over any route or route segment is not issued a flight release unless there are adequate communications and navigational facilities in satisfactory operating condition as necessary to conduct the flight safely.

Amendment or re-release en route requirements for flight release.

(2) A flight operations officer or person holding equivalent qualification shall ensure that the pilot in command is provided all available current reports or information on airport conditions and irregularities of navigation facilities that may affect the safety of the flight.

(3) A flight operations officer or person holding equivalent qualification shall ensure that a pilot in command is provided with all available Notices to airmen with respect to the routing, facilities and airports for his review of the operational flight plan.

298. (1) No flight operations officer or a person holding equivalent qualification shall release a flight unless he is thoroughly familiar with reported and forecasted weather conditions on the route to be flown.

Flight release with airborne weather radar equipment.

(2) No flight operations officer or person holding equivalent qualification shall release a flight unless he has communicated all information and concerns he may have regarding weather reports and forecasts to the pilot in command.

Air operator to comply with minimum standards.

299. (1) No flight operations officer or person holding equivalent qualification shall release an aircraft, when in his opinion or that of the pilot in command, expected or actual icing conditions exceed that for which the aircraft is certified and has sufficient operational de-icing or anti-icing equipment.

Director may make Standards or amend Standards.

(2) A national air operator shall ensure that an aircraft is not

released when weather conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, unless there is available to the pilot in command at the airport of departure, adequate facilities and equipment to accomplish the ground de-icing and anti-icing procedures approved for the national air operator by the Director.

(3) A national air operator shall ensure that before an aircraft is released in icing conditions the requirements set out in the aircraft operations standards are met.

300. A national air operator shall ensure that a flight is not released under visual flight rules or instrument flight rules unless the weather reports and forecasts indicate that the flight can reasonably be expected to be completed as specified in the release.

Transition provisions.

301. (1) A national air operator shall ensure that a flight release is not issued for a commercial air transport operation unless the fuel on board specified in the release is equivalent to or greater than the minimum flight planning requirements of these Regulations, including anticipated contingencies.

(2) A national air operator shall issue operating instructions and provide information on aircraft 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.

302. No flight operations officer or a person holding equivalent qualification shall issue a flight release unless he is familiar with the anticipated loading of the aircraft and is reasonably certain that the proposed operation shall not exceed the

(a) center of gravity limits;

(b) aircraft operating limitations; and

(c) minimum performance requirements, of the aircraft.