CIVIL AVIATION [(NO. 2) OPERATIONS] REGULATIONS, 2004

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Legal Notice No. 45

REPUBLIC OF TRINIDAD AND TOBAGO

THE CIVIL AVIATION ACT, 2001

REGULATIONS

MADE BY THE AUTHORITY WITH THE APPROVAL OF THE MINISTER UNDER SECTION 33 OF THE CIVIL AVIATION ACT

THE CIVIL AVIATION [(NO. 2) OPERATIONS] REGULATIONS, 2004

1. These Regulations may be cited as the Civil Aviation [(No.2) Operations] Regulations, 2004. Citation

2. In these Regulations—

"accident" means an occurrence associated with the operation of an aircraft which 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 can derive support in the atmospheres from the reaction of the air on surfaces other than the reaction of the air on the surface of the earth;

"Aircraft Flight Manual" means an approved Aeroplane Flight Manual or an approved Rotorcraft Flight Manual as applicable;

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

"air navigation facility" means any facility used available for use or designed for use in aid of air navigation, including aerodromes, 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 Authority 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;

"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;

"day" means the period of elapsed time, using Co-ordinated Universal Time or local time that begins at midnight and ends twenty-four hours later at the next midnight;

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

"crew" means any member of the flightcrew 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;

"defined point after take-off," means the point, within the take-off and initial climb phase, before which the ability of a Performance Class 2 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 in-operative;

"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;

"flightcrew" means those members of the crew of an aircraft who act as a 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 Test Examiner" means a person designated by the Authority, 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 Organization;

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

"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 aerodrome;

"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 the 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;

"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 aerodrome 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 Authority of the Minimum Equipment List of an individual operator;

"national air operator" means a person, organization or enterprise who has been issued a Trinidad and Tobago air operator certificate in accordance with the Civil Aviation [(No. 3) Air Operators Certification and Administration] Regulations, 2004;

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

"operator" means—

(a) a person, organization or enterprise engaged in or offering to engage in, aircraft operations and any person who causes or authorizes 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, 2001;

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"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 aerodromes 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 seven 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% 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 three hours time change apart;

"Special Flight Permit" means a permit issued by the Authority in accordance with the Civil Aviation [(No. 5) Airworthiness] Regulations, 2004 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 1 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 Organization 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;

"Trinidad and Tobago aircraft" means all civil aircraft registered in Trinidad and Tobago;

"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

Applicability of Regulations

3. (1) These Regulations prescribe the requirements for—

(a) operations conducted on a Trinidad and Tobago aircraft by airmen and operator certified by the Authority;

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

(c) operations of aircraft within Trinidad and Tobago by airmen or air operators of a foreign state.

(2) Operators of Trinidad and Tobago aircraft and flightcrew licenced in Trinidad and Tobago, operating outside of Trinidad and Tobago, 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 I

GENERAL OPERATIONS REQUIREMENTS

Requirements for registration markings

4. A person shall not operate an aircraft, unless such aircraft displays the proper markings prescribed under the Civil Aviation [(No. 4) Registration and Markings] Regulations, 2004 and in the case of a foreign registered aircraft, markings approved by the State of Registry.

General Operations of Aircraft

Restrictions on the operation of aircraft

5. (1) A person shall not operate an aircraft in Trinidad and Tobago 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

Special Flight Permit operational restrictions

6. Where a Trinidad and Tobago aircraft is issued a Special Flight Permit in accordance with the Civil Aviation [(No. 5) Airworthiness] Regulations, 2004 a person shall operate such aircraft in accordance with the limitations issued with such Special Flight Permit.

Aircraft Instruments and Equipment

Required aircraft instruments and equipment

7. A person shall not operate a Trinidad and Tobago 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 [(No. 7) Instruments and Equipment] Regulations, 2004.

Inoperative Instruments and Equipment

Restrictions on the use of inoperative instruments and equipment

8. (1) A person shall not take-off an aircraft with inoperative instruments or equipment installed, except as authorized by the Authority.

(2) A person shall not 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 Authority for that aircraft.

Aircraft Flight Manual and Aircraft Operating Manual

Required Aircraft Flight Manual, marking and placard requirements

9. (1) A person shall not operate a Trinidad and Tobago aircraft unless there is available in such aircraft—

(a) a current Aircraft Flight Manual; and

(b) an Aircraft Operating Manual approved by the Authority for the national air operator.

(2) Where an Aircraft Flight Manual required by subregulation (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 Authority and which provides the pilot in command with the necessary limitations for safe operation shall be on board such aircraft.

(3) A person shall not operate an aircraft within or over Trinidad and Tobago 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.

Aircraft and Equipment Inspections

Required aircraft and equipment inspections

10. (1) Unless otherwise authorized by the Authority, a person shall not operate a Trinidad and Tobago aircraft unless it has had the following inspections:

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

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

(c) an altimeter and pitot-static system inspection in the past twenty-four months where the aircraft is being operated under Instrument Flight Rules;

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

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

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

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

(4) The requirements for inspections under this regulation shall be prescribed under the Act or Regulations made thereunder.

Documents required on board an aircraft

Documents to be carried on aircraft for all operations

11. (1) Except as provided in regulation 9, a person shall not 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) *Airworthiness Certificate;

(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 Authority and the air operator;

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

(v) any documentation which may be required by the Authority 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 Authority may permit the information required under subregulation (1) to be presented in a form other than printed paper where accepted by the Authority.

(3) The Noise Certificate under subregulation (1)*(h)*, shall state the standards in Annex 16, Volume 1 of the Chicago Convention, and may be contained in any other document under subregulation (1), approved by the Authority.

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

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

Transport of Dangerous Goods

Approval to transport dangerous goods

12. (1) An operator shall not transport dangerous goods unless approved to do so by the Authority.

(2) Where an operator wishes to transport dangerous goods he shall apply to the Authority 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 General being granted access to the facilities of the organization to determine continued compliance with these Regulations.

Safe Transport of Dangerous Goods

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 Trinidad and Tobago.

(2) Where dangerous goods are to be transported outside of Trinidad and Tobago, the operator shall review and comply with the appropriate variations noted by Contracting States contained in Attachment 3 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.

Forbidden Goods

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

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

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

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 Trinidad and Tobago, the operator shall ensure that labelling and marking are in the English Language in addition to any other language requirements.

Dangerous Goods Transport Document

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 under subregulation (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 on a flight which takes place wholly or partly outside the territory of a State, the operator shall ensure that the English Language is used for the dangerous goods transport document in addition to any other language requirements.

Acceptance of Dangerous Goods by Operator or Handling Agent

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

19. (1) An operator or his handling agent, shall not 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.

Damage, Leakage or Contamination by Dangerous Goods

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 organization;

(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

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 of Dangerous Goods

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 on 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.

Information on Dangerous Goods

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.

Dangerous Goods Training Programmes

Requirement for dangerous goods training programme

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

(2) Notwithstanding the generality of subregulation (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 covers as a minimum, the areas identified under subregulation (1), to an extent sufficient to ensure that an awareness is gained—

(i) of the hazards associated with dangerous goods; and

(ii) how to identify such goods;

(b) crew members, passenger 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 subregulation (1), to an extent sufficient to ensure that an awareness is gained—

(i) of the hazards associated with dangerous goods;

(ii) how to identify such goods; and

(iii) what requirements apply to the carriage of such goods specified under regulation 13.

Reporting of Dangerous Goods Incident or Accident

Dangerous goods incident and accident reports

25. (1) An operator shall report a dangerous goods incident and accident to the Authority within seventy-two hours of the event, unless exceptional circumstances prevent such report.

(2) A report under subregulation (1), shall be made in the form prescribed by the Authority and shall be processed in accordance with established and approved procedures.

PART II

AIRCRAFT MAINTENANCE REQUIREMENTS

Applicability of Part II

26. (1) This Part applies to all general aviation, large complex aircraft operated in Trinidad and Tobago, whether or not the aircraft is registered in Trinidad and Tobago.

(2) Regulations 28 and 29 do not apply to an aircraft subject to an approved continuous maintenance programme approved by the Authority for a national air operator under Civil Aviation [(No. 3) Air Operator Certification and Administration] Regulations, 2004.

(3) Where any aircraft, not registered in Trinidad and Tobago and operating under an inspection programme approved or accepted by the State of Registry, does not have the equipment required by the Authority for operations within Trinidad and Tobago, 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 Authority prior to operation of that aircraft in Trinidad and Tobago.

General Aircraft Requirements

General requirements in respect of aircraft

27. (1) An operator of an aircraft shall be primarily responsible for maintaining such aircraft in an airworthy condition, including compliance with all airworthiness directives.

(2) A person shall not perform maintenance, preventive maintenance, or alterations to an aircraft other than as prescribed by these Regulations, the Act or Regulations made thereunder.

(3) A person shall not certify an aircraft as airworthy unless he is qualified in accordance with the Act or Regulations made thereunder to issue such certification.

(4) A person shall not 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 Authority under the Act or Regulations made thereunder.

Requirements of operator in respect of aircraft

28. An operator shall— Requirements of operator in respect of aircraft

(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.

Inspections of Aircraft

Requirements for inspection of aircraft

29. (1) Except as provided in subregulation (6), a person shall not operate an aircraft unless, within the preceding twelve 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 authorized under the Act or Regulations made thereunder; or

(b) an inspection for the issuance of an Airworthiness Certificate in accordance with the Act or Regulations made thereunder.

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

(3) Except as provided in subregulation (6), a person shall not operate for hire—

(a) 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 one hundred hours of time in service, the aircraft has—

(c) received an annual or one hundred 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 one hundred hour limitation under subregulation (3), may be exceeded by no more than ten hours while en route to reach a place where the inspection can be done.

(5) The excess time, under subregulation (4), used to reach a place where the inspection can be done shall be included in computing the next one hundred hours of time in service.

(6) Subregulations (1) through (5), shall not apply to—

(a) an aircraft that carries a Special Flight Permit;

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

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

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

(8) A written request under subregulation (7), shall be accompanied by—

(a) details of—

(i) the Aircraft Maintenance Engineer who shall be conducting inspections and maintenance and who holds a type rating required by the Act or Regulations made thereunder;

(ii) the approved Aircraft Maintenance Organization appropriately rated in accordance with the Act or Regulations made thereunder; or

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

(b) a current inspection procedures manual available and readily understandable to flightcrew and maintenance personnel containing—

(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 ten 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 and 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 Authority for use by an operator; or

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

(10) An operator shall—

(a) include in the programme selected under subregulation (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 selected under subregulation (9), to the person performing inspection on the aircraft.

(11) An aircraft shall not be issued a Certificate of Release to Service, 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 selected under subregulation (9).

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

(13) A request for an approval under subregulation (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 of 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. Schedule 1

(15) The frequency and detail of the progressive inspections under this regulation shall be as set out in Schedule 1.

Amendment to Aircraft Inspection Programme

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

(2) Where an operator receives a notification under subregulation (1), he shall make any change in the inspection programme as recommended by the Authority.

(3) Notwithstanding subregulation (2), an operator may petition the Authority to reconsider the notification, within thirty days of receipt thereof.

(4) A petition under subregulation (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 Authority.

Maintenance Records of Aircraft

31. (1) An operator of an aircraft shall keep a maintenance record of— Owner, lessee or operator to keep maintenance records

(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.

Maintenance Records Retention

Owner, lessee or operator to retain maintenance records

32. (1) Except for records maintained by an air operator, 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 one hundred hour, annual and other required or approved inspections, as appropriate for each aircraft, including the airframe and each engine, propeller, rotor and appliance of an aircraft to include—

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

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

(iii) the signature and 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 subregulation (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 General.

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

Transfer of Maintenance Records

Procedure on transfer of maintenance records

33. An operator who sells or leases a Trinidad and Tobago aircraft shall transfer to the purchaser or lessor at the time of sale or lease, the records identified in regulation 32 in respect of such 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 Authority.

PART III

FLIGHTCREW REQUIREMENTS

Composition of the flightcrew

34. (1) An operator shall ensure that—

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

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

(c) procedures are established, acceptable to the Authority, to prevent the crewing together of inexperienced flightcrew;

(d) one pilot amongst the flightcrew, 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 flightcrew includes one crew member who holds a Flight Engineer Licence issued under the Civil Aviation (General Application and Personnel Licencing) Regulations, 2004 or suitably qualified flightcrew acceptable to the Authority;

(f) an operator shall ensure that when engaging the services of flightcrew who are self-employed or working on a freelance or part-time basis, all applicable flightcrew 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 flightcrew members may fly for the purpose of commercial air transport;

(h) a co-pilot is included as part of the flightcrew in commercial air transport operations under Instrument Flight Rules, unless the Authority has issued a deviation.

(2) Notwithstanding the minimum number and composition of flightcrew specified in an Aircraft Flight Manual, where the Director General 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 flightcrews are changed,

require that the number and composition of the flightcrew should

exceed the number specified in such Aircraft Flight Manual, he may recommend the Authority increase the minimum number of flightcrew required for his operation.

(3) An operator shall ensure the revised minimum number and composition of flightcrew under subregulation (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 nine, the minimum flightcrew shall be two pilots; or

(b) for all turbojet aircraft, the minimum flightcrew shall be two pilots.

(5) Where an aircraft other than those covered by subregulation (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) such pilot shall have a minimum of fifty hours flight time on the specific type or class of aircraft under Instrument Flight Rules of which ten 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 five Instrument Flight Rules flights, including three instrument approaches, carried out during the preceding ninety days on the type or class of aircraft in the single-pilot role.

(6) The requirement under subregulation (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 subregulation (5) are not satisfied, the minimum flightcrew shall be two pilots.

Qualification for flightcrew

Operator to ensure flightcrew qualifications

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

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

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

(b) contains the proper ratings.

(3) A pilot shall not 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 in the specific type of aircraft used.

Requirements for flightcrew

Licence requirements for flightcrew

36. (1) A person shall not act as pilot in command or in any other capacity as a required flightcrew member of—

(a) a Trinidad and Tobago aircraft, unless he carries in his personal possession the appropriate and valid licence for that flightcrew 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 flightcrew of an aircraft shall include at least one member who holds a valid licence issued or rendered valid by the Authority, authorizing operation of the type of radio transmitting equipment to be used.

Commercial Air Transport Services Requirements

Limitation on use of services for commercial air transport operations

37. A person shall not act as a required flightcrew member, nor shall any national air operator require a person to act as a required flightcrew member in commercial air transport operations, where he does not meet the requirements of the Civil Aviation (General

Application and Personnel Licensing) Regulations, 2004, and has successfully completed the full training programme under these Regulations of the national air operator.

Requirements for Instrument Flight Rules Operations

Rating required for Instrument Flight Rules operations

38. A person shall not 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.

Category II or Category III Operations

Special authorization required for Category II or III operations

39. (1) Except as provided in subregulation (2), a person shall not act as a flightcrew member of an aircraft in a Category II or III operation under Part VII unless—

(a) in the case of a pilot in command, he holds a current Category II or III pilot authorization issued in accordance with the Civil Aviation (General Application and Personnel Licencing) Regulations, 2004 for that type of aircraft; and

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

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

Pilot Logbook Requirements

Pilot logbooks

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

(2) A Student Pilot shall carry his logbook, including the proper Flight Instructor endorsements, on all solo cross-country flights.

Pilot in Command Recency Requirements

Recency requirements for a pilot in command

41. (1) A person shall not act as pilot in command of an aircraft carrying passengers, nor of an aircraft certified for more than one required flightcrew member unless within the preceding ninety days that pilot has—

(a) made three 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 three 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 under subregulation (1), shall satisfactorily complete a re-qualification training programme acceptable to the Authority.

(3) Requirements of subregulations (1) and (2), may be satisfied in a flight simulator.

(4) The ninety-day period prescribed under subregulation (1), may be extended up to a maximum of one hundred and twenty days where the pilot meets the requirements of subregulation (1), on a line flight under the supervision of a Type Rating Instructor or Flight Test Examiner.

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

Instrument Flight Rules for Instrument Meteorological Conditions Requirements

Requirements for flying under Instrument Flight Rules or Instrument Meteoro-logical Conditions

42. (1) A person shall not act as pilot in command in an aircraft under Instrument Flight Rules, nor in Instrument Meteorological Conditions, unless he has, within the past twelve months—

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

(b) completed at least six 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 twelve months following such check.

Co-pilot Recency Requirements

Recency take-off and landings requirements for co-pilot

43. (1) A pilot shall not act as co-pilot at the flight controls of an aircraft during take-off and landing unless, within the preceding ninety days, such pilot has—

(a) made three 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 three 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 take-offs and landings prescribed by subregulation (1), shall satisfactorily complete a re-qualification training programme acceptable to the Authority.

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

(4) The ninety-day period prescribed under subregulation (1), may be extended up to a maximum of one hundred and twenty days where the pilot meets the requirements of subregulation (1), on a line flight under the supervision of a type rating instructor or Flight Test Examiner.

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

General Aviation Pilot Proficiency Requirements

Required proficiency for general aviation pilots

44. (1) A person shall not act as pilot in command of an aircraft type certified for more than one pilot unless, since the beginning of the preceding twelve months, he has passed with a Flight Test Examiner, a proficiency check in an aircraft requiring more than one pilot.

(2) A person shall not act as pilot in command of an aircraft type certified for more than one pilot unless, since the beginning of the preceding twenty-four months, he has passed a proficiency check in the aircraft type to be operated.

(3) A person shall not act as pilot in command of an aircraft type certified for a single pilot unless, since the beginning of the preceding twenty-four 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) A person shall not act as co-pilot of an aircraft type certified for more than one pilot unless, since the beginning of the preceding twelve months, he has—

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

(b) logged three 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.

Privileges and Limitations of Pilots

Pilot privileges and limitations

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

PART IV

Crew Member Duties and Responsibilities

Crew responsibilities

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

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

(b) 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 subregulation (2), shall require a crew member to report an occurrence which has already been reported by another crew member.

(4) A crew member shall not 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 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) A crew member shall not—

(a) consume alcohol less than eight 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 check lists 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.

Pilot in Command Authority

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.

Compliance with Regulations of a Territory

Compliance with local regulations

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

(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 subregulation (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 under subregulation (2)*(b)*, shall be submitted by the pilot in command to the Authority within ten days of the violation in the form prescribed.

Negligent or Reckless Operations of Aircraft

Prohibition on the negligent or reckless operations of aircraft

49. A person shall not operate an aircraft in a negligent or reckless manner so as to endanger life or property.

Fitness of flightcrew

Fitness of flightcrew

50. (1) A person shall not act as pilot in command or in any other capacity as a required flightcrew when he is aware of any decrease in his medical fitness which might render him unable to safely exercise the privileges of his licence.

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

(a) commenced where any flightcrew 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 aerodrome where the capacity of the flightcrew to perform functions is significantly reduced by impairment of faculties due to fatigue, sickness or lack of oxygen.

Crew Member Seat Belt and Shoulder Harness

Crew member use of seat belt and shoulder harness

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 flightcrew occupying a pilot seat shall keep the safety harness fastened during take-off and landing phases.

(3) Crew members other than those specified in sub-regulation (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.

Duty Station Requirements for Flightcrew

Requirements of flightcrew at duty stations

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

(2) A flightcrew 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.

Emergency Duties of Flightcrew

Flightcrew emergency duties

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

Required Equipment for Crew

Required crew equipment

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

(2) A flightcrew 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 flightcrew 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 flightcrew 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.

Checklist Procedures Compliance

55. A pilot in command shall ensure that the flightcrew follows the approved checklist procedures under the Civil Aviation [(No. 3) Air Operator Certification and Administration] Regulations, 2004, when operating the aircraft.

Requirement to comply with approved checklist procedures

Search and Rescue Information

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.

Requirement to have search and rescue information on board aircraft

Aircraft and Flight Documentation

57. A pilot in command shall produce to an Inspector of the Authority 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.

Production of aircraft and flight documentation

Cockpit Compartment Security for Commercial Air Transport Operations

58. A pilot in command shall ensure that approved procedures under Civil Aviation [(No. 3) Air Operator Certification and Administration] Regulations, 2004, to prevent unauthorized persons from entering the flightcrew compartment during flight are complied with at all times during passenger carrying commercial air transport operations.

Requirements for cockpit compartment security for commercial air transport operations

General Admission to Cockpit

59. (1) A pilot in command shall not admit any person to the cockpit of a Trinidad and Tobago 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 Authority responsible for certification, licencing or inspection, where this is required for the performance of his official duties; or

(c) permitted by and carried out in accordance with 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 authorized by the Authority 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.

Admission to Cockpit by Inspector

Admission of Inspector to the cockpit

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

(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.

In-flight Fuel Management Requirements

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 aerodrome 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.

Flightcrew Duties During Critical Phases of Flight

Duties of flightcrew during critical phases of flight

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

(2) A pilot in command shall not permit a flightcrew 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 flightcrew member required to be on cockpit duty shall communicate through boom microphones below Flight Level 150.

Manipulation of the Controls in Commercial Air Transport Operations

Restriction on manipulation of the controls in commercial air transport operations

63. (1) A pilot in command shall not allow an unqualified person to manipulate the controls of an aircraft during commercial air transport operations.

(2) A pilot in command shall not 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 is—

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

(b) an authorized pilot safety representative of the Authority or who has the permission of the pilot in command, is qualified in the aircraft, and is checking flight operations.

Simulated Abnormal Situations

Simulated abnormal situations in flight for commercial air transport operations

64. A person shall not cause or engage in simulated abnormal or emergency situations or the simulation of instrument meteorological conditions by artificial means during commercial air transport operations.

Technical Logbook

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

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

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 Authority of any occurrence that endangers or could endanger the safety of operation;

(b) a report under paragraph *(a)*, by the pilot in command shall be despatched within seventy-two 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 Authority in accordance with paragraph *(a)*.

(2) In the case of incidents reported in accordance with sub-regulation (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 Authority.

Reporting Procedures for Accidents and Serious Incidents

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 organization 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 seventy-two hours of the time when the accident or serious incident occurred.

Air Traffic Incidents Reporting Procedures

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 flightcrew; and

(iii) failure of air traffic control facilities; and

(b) the Authority of the incident.

Airborne Collision Avoidance System

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 Authority on any occurrence of an Airborne Collision Avoidance System Resolution Advisory.

Bird Hazards and Bird Strikes

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 Authority, 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.

In-flight Emergency Reporting

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 under subregulation (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.

Unlawful Interference Reporting Procedures

Procedures for reporting 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 authority of the State where the incident occurred and to the Authority.

Potentially Harzardous Conditions Reporting Procedures

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 such as an irregularity in a ground or navigational facility, a meteorological phenomenon or a volcanic ash cloud is encountered during flight.

Cockpit Voice Recorder and Flight Data Recorder

Operation of cockpit voice and flight data recorder

75. (1) A pilot in command shall ensure that whenever an aircraft has flight recorders installed, such recorders are operated continuously from the instant—

(a) for a flight data recorder, the aircraft begins its take-off roll until it has completed the landing roll; and

(b) for a cockpit voice recorder, the initiation of the pre-start checklist until the end of the aircraft shutdown checklist.

(2) A pilot in command, in order to preserve the data for an accident or incident investigation by the Authority, shall not, 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 Authority as may be requested to conduct an investigation.

Minimum Supply and Use of Oxygen

Requirements for minimum 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 [(No.7) Instruments and Equipment] Regulations, 2004.

(3) A pilot in command shall ensure that all flightcrew 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 thirty 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.

Portable Electronic Devices

Restrictions on use of portable electronic devices

77. A pilot in command or senior cabin crew shall not permit any person to use, nor shall any person use a portable electronic device on board an aircraft that may adversely affect the performance of the aircraft systems and equipment unless—

(a) for Instrument Flight Rules operations other than commercial air transport, he allows such a device prior to its use; 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 the crew members use; and

(c) he informs passengers of those portable electronic devices that may be used on the aircraft.

PART V

FLIGHT PLANNING AND SUPERVISION

Flight Plans

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 under subregulation (1), shall be filed for all Visual Flight Rules and Instrument Flight Rules 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 sixty 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 ten minutes before the aircraft is estimated to reach—

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

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

Commercial Air Transport Operations Air Traffic Control Flight Plan

Air traffic control flight plan for commercial air transport operations

79. A person shall not take-off an aircraft in commercial air transport operations where a flight plan has not been filed, except as authorized by the Authority.

Flight Plan Requirements

Contents of a flight plan

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—

(a) aircraft identification;

(b) flight rules and type of flight;

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

(d) equipment;

(e) departure aerodrome and alternate, where required;

(f) estimated off-block time;

(g) cruising speed;

(h) cruising level;

(i) route to be followed;

(j) destination aerodrome and total estimated elapsed time;

(k) alternate aerodrome;

(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 Authority.

(2) Whatever the purpose for which it is submitted, a flight plan under subregulation (1), shall contain information, as applicable, on the items set out in subregulation (1)*(a)* through *(k)* regarding the whole route or the portion thereof for which the flight plan is submitted.

Planned Re-clearance Requirements

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.

Changes to Flight Plan

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 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, is incorrect at time of departure, such circumstance constitutes a significant change under subregulation (2) and shall be reported to the Air Traffic Control Facility.

Closing a Flight Plan

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 aerodrome, 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 under sub-regulation (2) does not exist at the arrival aerodrome, 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 aerodrome 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 aerodrome;

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

(d) arrival aerodrome; 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 Requirements

Requirements for aircraft airworthiness and safety precautions

84. (1) A pilot in command shall not operate an aircraft in flight unless he is satisfied that—

(a) the aircraft is airworthy, duly registered and that 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 to 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 subregulation (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 VI can be complied with for the flight to be undertaken.

Adequacy of Operating Facilities

Requirement for adequacy of operating facilities

85. (1) A person shall not commence a flight unless it has been determined by every reasonable means available that the ground or water areas and aerodrome facilities including communication facilities

and navigational aids are available and directly required for such flight and for the safe operation of the aircraft, 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 Requirement

Pilot in command to be familiar with 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 advance weather conditions.

Visual Flight Rules Weather Limitations

Weather limitations for Visual Flight Rules Flights

87. A person shall not 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.

Destination Aerodromes Instrument Flight Rules Requirements

Instrument Flight Rules, destination aerodrome requirements

88. (1) A person shall not, 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 aerodrome of intended landing and where required, at least one suitable alternate at the estimated time of arrival, will be at or above the—

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

(b) minimum operating altitude, where no instrument approach procedure is to be used, that would allow a Visual Flight Rules decent to the aerodrome.

(2) Notwithstanding subregulation (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 aerodrome meets the Instrument Flight Rules weather selection criteria.

Destination Alternate Instrument Flight Rules Requirement

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 aerodrome is selected and specified in the operational flight plan under regulation 103 and the Air Traffic Control flight plans, unless— Instrument Flight Rules destination alternate requirements

(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 aerodrome of intended landing and for a reasonable period before and after such time, the approach and landing may be made under Visual Flight Rules; or

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

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

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

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

(b) available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two 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 subregulation (2)*(b)* may be reduced upon approval of the Authority for—

(a) helicopters; or

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

Alternate Aerodrome Selection Criteria for Instrument Flight Rules

Instrument Flight Rules, alternate aerodrome selection criteria

90. (1) A pilot in command shall not designate an alternate aerodrome in an Instrument Flight Rules flight plan unless—

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

(b) specifically authorized by the Authority.

(2) Unless otherwise specifically authorized by the Authority, where approach minima under this regulation are not published, and where there is no prohibition against using the aerodrome 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 statute miles for a precision approach procedure; or

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

Off-Shore Alternates for Helicopter Operations Requirements

Requirements for off-shore alternates for helicopter operations

91. (1) A person shall not designate an off-shore alternate aerodrome 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 aerodrome 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 Authority; and

(f) for Instrument Flight Rules operations, an instrument approach procedure shall be prescribed and available.

Take-Off Alternate Aerodromes Requirements for Commercial Air Transport Operations

Take-off alternate aerodromes for commercial air transport operations

92. (1) A person shall not release or take-off an aircraft without a suitable take-off alternate aerodrome specified in the flight release where it would not be possible to return to the aerodrome of departure.

(2) A national air operator shall ensure that each take-off alternate aerodrome specified under subregulation (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 aerodrome shall be selected and specified in the operational flight plan where the weather conditions at the aerodrome of departure are at or below the applicable aerodrome operating minima or it would not be possible to return to the aerodrome of departure for other reasons.

(4) An operator shall not select an alternate aerodrome unless—

(a) the appropriate weather reports or 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 aerodrome, the weather condition will be at or above the applicable landing minima specified for that aerodrome;

(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.

Distance Requirement for Two-Engine Aeroplanes

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

93. (1) Unless specifically approved by the Authority, a national air operator shall not operate a large two-engine aeroplane over a route which contains a point from an adequate aerodrome, further than the distance flown in sixty minutes at the one-engine-inoperative cruise speed determined in accordance with subregulation (2), with either—

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

(b) a maximum take-off mass greater than forty-five thousand, three hundred and sixty kilogrammes.

(2) A national air operator shall determine a speed for the calculation of the maximum distance to an adequate aerodrome for each two-engine aircraft type or variant operated, not exceeding the maximum operating speed based upon the true airspeed that the aircraft 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 subregulation (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 subregulation (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 subregulation (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 subregulation (2);

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

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

Extended Range Operations with two-engine aeroplane

94. (1) An operator shall not conduct operations beyond the threshold distance determined in accordance with regulation 93 unless so approved by the Authority. Extended range operations with two-engine aeroplane

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

(3) Where the Director General 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 these Regulations he may recommend the Authority approve the operation.

En-Route Alternate Aerodromes for extended range operations Requirements

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. Requirements for en-route alternate aerodromes for extended range operations

(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 Authority.

(3) A person shall not select an aerodrome as an Extended Range Operations en-route alternate aerodrome unless the appropriate weather reports or 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 aerodrome, the weather conditions will be at or above the planning minima prescribed in Schedule 2. Schedule 2

Fuel, Oil and Oxygen Planning and Contingency Factors

Fuel, oil and oxygen planning and contingency factors

96. (1) A person shall not 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 under subregulation (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 aerodrome, 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 two thousand nautical miles, the minimum fuel supply calculation includes an additional amount of fuel equal to that necessary to fly ten per cent of the total time for the flight from take-off to destination.

(4) A pilot in command shall not commence a flight to an aerodrome where a suitable alternate aerodrome is not available due to the destination aerodrome being isolated, without enough reserve fuel for two additional hours flight at normal cruise fuel consumption.

(5) The Authority may grant specific approval for commercial air transport operations to isolated aerodromes without regard to fuel consumption requirement of subregulation (4).

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

(7) Notwithstanding subregulations (1) through (5) the Authority 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) Any extra fuel under subregulation (7) shall be included in the computation of the minimum fuel requirement for that route.

Minimum Fuel Supply for Visual Flight Rules Flights

Fuel supply requirement for Visual Flight Rules Flight

97. (1) A person shall not 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 thirty minutes thereafter; or

(b) for flights at night, for at least forty-five minutes thereafter; and

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

(2) A person shall not 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 twenty minutes thereafter; or

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

Minimum fuel supply for Instrument Flight Rules Flight

Fuel supply requirement for Instrument Flight Rules flight

98. (1) A person shall not commence a flight under Instrument Flight Rules unless there is enough fuel supply, considering weather reports and forecasts, to—

(a) fly to the first point of intended landing;

(b) fly from that aerodrome to the planned alternate aerodrome, where required; and

(c) fly thereafter at normal cruising speed—

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

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

(2) For Instrument Flight Rules flight to isolated aerodromes, the two hour minimum reserve specified in subregulation 96(4) shall apply.

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

Commercial Air Transport Flight Planning Document Distribution and Retention

Requirements 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, aerodrome and alternate aerodromes.

(b) a load manifest, which takes into consideration the distribution of the load, center 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 aerodrome.

(2) A person shall not take-off 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 subregulation (1), to the destination aerodrome.

(4) Completed flight preparation documents shall be kept by a national air operator in the manner set out in the Civil Aviation [(No. 3) Air Operator Certification and Administration] Regulations, 2004.

(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 under subregulation (5), shall be filed at the designated retention location.

(7) Where the procedures under subregulation (6), are not possible the flight plan shall be left with the aerodrome authority or on record at the appropriate Authority specified by the national air operator in his Operations Manual.

(8) Notwithstanding subregulation (6), the Authority 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.

Aircraft Loading, Mass and Balance Requirements

Requirements for aircraft loading, mass and balance

100. (1) A person shall not 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) A person shall not operate an aircraft unless the calculations for the mass and center 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 subregulation (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 Schedule 3, 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.

Schedule 3

(7) The person preparing the mass and balance documentation under subregulation (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 Authority, a national air operator may use documentation procedures other than those required by this regulation.

Maximum Allowable Weights to be Considered on All Load Manifests

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 take-off time; 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 aerodromes.

Commercial Air Transport Operations Flight Release Requirements

Requirement for flight release for commercial air transport operations

102. (1) A person shall not commence a flight under a flight following system without specific authority from the person authorized by the air operator to exercise operational control over the flight.

(2) A person shall not commence a passenger-carrying flight in commercial air transport operations for which there is a published schedule, unless a qualified person authorized 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.

Commercial Air Transport Operations Operational Flight Plan Requirements

Requirements for operational flight plan for commercial air transport operations Schedule 4

103. (1) A national air operator shall not permit a person to commence a flight unless his operational flight plan meets the requirements set out in Schedule 4 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 aerodromes, weather reports, forecasts and notices to Airmen for the routing and aerodromes of operation.

(5) A person shall not continue a flight from an intermediate aerodrome without a new operational flight plan where the aircraft has been on the ground more than six 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 flight operations officer; and

(c) the method of recording the formal approval of the plan by the 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 ninety days.

Commercial Air Transport Records of Emergency and Survival Equipment Requirement

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 under subregulation (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 VI

AIRCRAFT OPERATING AND PERFORMANCE LIMITATIONS

Applicability

Applicability

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 Authority 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 Authority; 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 1 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 Authority.

Aircraft Performance Data

Aircraft performance calculations

107. (1) An operator shall ensure that the aircraft performance data contained in the Aircraft Flight Manual, or other authorized 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

General weight and obstruction clearance limitations

108. (1) An operator shall not 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) An operator shall not 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 the intended en-route path or any 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

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) An operator shall not operate a single-engine aircraft used for revenue passenger carrying operations unless such aircraft is continually operated in daylight, under Visual Flight Rules.

(2) An operator shall not 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 subregulation (2)*(c)*, is for the purpose of these regulations, considered to be a single engine aircraft and shall comply with the requirements of subregulation (4).

(4) A single-engine aircraft shall only be operated 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.

Mass Limitations

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 aerodrome, 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 aerodrome of intended landing and at any alternate aerodrome shall not exceed the maximum landing mass specified in the flight manual for the pressure-altitude appropriate to the elevation of the aerodrome, 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 aerodrome of intended landing and at any alternate aerodrome shall not exceed the relevant maximum mass at which compliance was demonstrated with the applicable noise certification standards, unless otherwise authorized by the Authority in respect of that aerodrome.

Aircraft Performance Calculations

Aircraft performance calculations

113. (1) A national air operator shall not take-off 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 Authority.

(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 fifty per cent of any reported headwind component and not less than one hundred and fifty per cent of any reported tailwind component.

Take-off Limitations

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 aeroplane; and

(ii) by at least 60 metres horizontally within the aerodrome boundaries and by at least ninety meters horizontally after passing the boundaries, without banking more than fifteen 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 aeroplane 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 2 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

En-route limitations with all engines operating

115. A national air operator shall not take-off 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 ten miles of each side of the intended track.

En-Route Limitations with One Engine In-operative

En-route limitations where one engine is inoperative

116. (1) A national air operator shall not take-off 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 aerodrome 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}^2 (when V_{so} is expressed in knots) at an altitude of per 1,000 feet above all terrain and obstructions within 5 statute miles, on each side of the intended track; and

(ii) a positive slope at an altitude of at least 1,500 feet above the aerodrome 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 aerodrome that allows at least 2,000 feet clearance above all terrain and obstructions within 5 statute miles, on each side of the intended track; and

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

(2) The climb rate specified in subregulation (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 statute miles clearance margin stated in subregulation (1)*(a)*, shall be increased to 10 statute miles where navigational accuracy does not meet the ninety-five per cent containment level.

(4) An air operator shall not 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 with Two Engines Inoperative

117. (1) A national air operator shall not take-off an aeroplane used in commercial air transport operations having three or more engines at such a weight where there is no suitable landing aerodrome within ninety minutes at any point along the intended route with all engines operating at cruising power, unless that aircraft can, in the event of simultaneous power failure of two critical engines at the most critical point along that route, continue to a suitable landing aerodrome while allowing— En-route limitations where two engines of an aeroplane are inoperative

(a) for a turbine engine powered aeroplane—

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

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

(iii) enough fuel to continue to the aerodrome of intended landing, to arrive at an altitude of at least 1,500 feet directly over the aerodrome 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 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 aerodrome of intended landing and to arrive at an altitude of at least 300 m directly over that aerodrome.

(2) A national air operator shall ensure that in computing the fuel required to continue to the aerodrome of intended landing under subregulation (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 authorized 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 aerodrome and to arrive at an altitude of at least 1,000 feet directly over that aerodrome.

(5) A national air operator shall not take-off a Performance Class 1 helicopter or Performance Class 2 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.

Aircraft Landing Performance Limitations

Aircraft landing limitations

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 aerodrome 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.

(2) A national air operator shall not take-off an aeroplane used in commercial air transport operation unless its weight on arrival at either the intended destination aerodrome or any planned alternate aerodrome 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, sixty per cent of the effective length of each runway;

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

(3) For the purpose of determining the allowable landing weight at the destination aerodrome, 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 one hundred and fifteen 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 subregulation (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 aerodrome because it could not meet the requirements of subregulation (2)*(a)* for mass landing for such destination aerodrome, may take-off from the departure aerodrome where an alternate aerodrome is specified that meets all the requirements of subregulation (2).

(6) An air operator shall not take-off a helicopter used in commercial air transport unless, with all engines operating on arrival at the intended destination landing site or any planned alternate landing, it can clear all obstacles on the approach path and can land and stop within the landing distance available.

(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, clear all obstacles on the approach path and be able to land and stop within the landing distance available or 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 2 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 alternative landing site after reaching a defined point before landing, 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 VII

FLIGHT RULES

Applicability

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

General Flight Rules Requirements

General flight rules requirements

120. (1) The regulations 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 Trinidad and Tobago, 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 aerodrome shall be in compliance with the general rules and, in addition, when in flight, either with the Visual Flight Rules or Instrument Flight Rules.

Operation of Aircraft on the Ground

Restrictions on the operation of aircraft on the ground

121. (1) A person shall not taxi an aircraft on the movement area of an aerodrome unless the person at the controls—

(a) has been authorized 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 aerodrome 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 aerodrome.

(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.

Take-off Conditions

Required take-off conditions

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

(a) according to the available information, the weather at the aerodrome and the condition of the runway intended to be used will allow for a safe 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.

Flight into Known or Expected Icing Conditions

Requirements and restrictions where flight into known or expected icing

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.

(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 of the aircraft which might adversely affect the performance or controllability of the aircraft.

(4) A pilot in command shall not take-off and an air operator shall ensure that a pilot is not allowed to take-off 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 Authority 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) A pilot in command shall not 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

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

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 six hundred 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 five hundred 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 one hundred and fifty metres to any person, vessel, vehicle, or structure.

(2) The pilot of a helicopter is not 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 Authority.

(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 under subregulations (4) and (5) shall be approved by the Authority, 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 General may recommend that that the Authority approve the procedures under subregulation (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.

Commercial Air Transport Operations Minimum Safe Visual Flight Rules Altitudes

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 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 statute miles from the center of the intended course.

Aerodrome operating minima

Aerodrome operating minima

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

(2) Operating minima established under subregulation (1), shall not be lower than any that may be established for such aerodromes or heliports by the State in which the aerodrome 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 flightcrew, 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) The pilot in command of an aircraft shall not commence take-off unless the weather conditions at the aerodrome of departure are equal to or better than applicable minima for landing at that aerodrome unless a suitable take-off alternate aerodrome 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.

Threshold Crossing Height for Precision Approaches

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.

Required Instrument Approach Operating Minima

Instrument approach operating minima requirements

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

(2) For instrument approach and landing operations, aerodrome-operating minima below eight hundred metres visibility should not be authorized unless Runaway Visual Range information is provided.

(3) The Director General may recommend that that the Authority 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 aerodrome utilized for instrument flight operation.

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

General Operating Rules for Category II and III Operations

General operating rules for Category II and III operations

130. (1) An operator shall not 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 equipped in accordance with the standards prescribed by the Director General;

(b) The operations are approved by the Authority;

(c) the flightcrew consists of either 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 authorized unless Runaway Visual Range information is provided.

(3) When the approach procedure being used provides for and requires the use of a decision height, the authorized 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 authorized by the Authority, a pilot operating an aircraft in a Category II or Category III approach that provides and requires use of a decision height or alert height shall not continue the approach below the authorized 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 three 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 authorized by the Authority, a pilot operating an aircraft shall immediately execute an appropriate missed approach whenever, prior to touchdown, the requirements of subregulation (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 authorization issued by the Authority.

(7) Subregulations (1) through (6) shall not apply to operations conducted by a national air operator issued a certificate under the Civil Aviation [(No. 3) Air Operator Certification and Administration] Regulations, 2004.

(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 authorizations and ratings prescribed under the Civil Aviation [(No. 1) General Application and Personnel Licensing] Regulations, 2004;

(b) each flightcrew member has adequate knowledge of, and familiarity 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 authorized by the Authority, 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 Authority for approval prior to conducting Category II and Category III operations.

Category II and Category III Manual

Requirements for Category II and Category III manual

131. (1) Except as provided in subregulation (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 Authority for approval.

(3) Where a submission under subregulation (2) is accompanied by a request to initiate operations in accordance with an amendment, such operations shall not commence unless the Authority so approves.

Schedule 5

(4) An operator shall ensure that his Category II or Category III manual meets the requirements of Schedule 5.

(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 Authority.

(6) Subregulations (1) and (4) shall not apply to operations conducted by a national air operator issued a certificate under the Civil Aviation [(No. 3) Air Operator Certification and Administration] Regulations, 2004.

Diversion Decision Procedures

Procedures to be followed where a diversion decision is to be made

132. (1) Except as provided in subregulation (2), a pilot in command shall land an aircraft at the nearest suitable aerodrome at which a safe landing can be made whenever an engine of an aircraft fails or is shut down to prevent possible damage.

(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 aerodrome where in his opinion proceeding to that aerodrome is as safe as landing at the nearest suitable aerodrome after considering the—

(a) nature of the malfunction and the possible mechanical difficulties that may occur should 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 aerodrome to be used.

Operation Near Other Aircraft

Procedures to be used for formation flight

133. (1) A person shall not operate an aircraft so close to another aircraft as to create a collision hazard.

(2) A person shall not 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 under subregulation (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

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 under subregulation (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) 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 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 aerodrome for the purpose of landing, the aircraft at the lower altitude has the right-of-way.

(13) Notwithstanding subregulation (12), power driven heavier than air aircraft shall give way to gliders for the purpose of landing.

(14) An aircraft taxiing on the manoeuvring area of an aerodrome 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 aerodrome, 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 authorized by the aerodrome 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

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 to 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

Requirements for the use of aircraft lights

136. (1) Except as provided in subregulation (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 subregulation (4), a person shall not park or move an aircraft at night in a movement area or in dangerous proximity to a movement area of an aerodrome, 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 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 operations; 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.

Simulated Instrument Flight Requirements

137. (1) An operator shall ensure that an aircraft is not operated in simulated instrument flight unless— Requirements for simulated instrument flight

(*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.

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. Requirements for in-flight simulation of abnormal situations

Requirements for Dropping, Spraying, Towing

139. Except under conditions prescribed by the appropriate Authority and as indicated by relevant information, advice and clearance from Air Traffic Control Authority a pilot shall not— Restrictions on dropping, spraying and towing

(*a*) drop, dust or spray from an aircraft;

(*b*) tow an aircraft or other object; or

(*c*) allow parachute descents unless formally approved by the Authority.

Requirements for Participation in Aerobatic Flight

140. (1) A person shall not operate an aircraft in aerobatic flight— Restriction on 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 aerodrome;

(d) below an altitude of one thousand, five hundred feet above the land or sea surface; or

(e) when the flight visibility is less than 3 statute miles.

(2) A person shall not operate an aircraft in manoeuvres exceeding a bank angle of sixty degrees or pitch angle of thirty degrees from level flight attitude unless all occupants of the aircraft are wearing parachutes packed by a qualified parachute rigger in the past twelve months.

Restriction on Location of Flight Test

Restrictions on where flight test is conducted

141. A person shall not flight-test an aircraft except over open water, or sparsely populated areas having light traffic.

Restriction on use of Aircraft in Prohibited Areas and Restricted Areas

Restrictions on the use of an aircraft in a prohibited or restricted area

142. (1) A person shall not 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 a Civil Aviation Authority to be prohibited or restricted area.

Operations in Minimum Navigation Performance Specification or Reduced Vertical Separation Minimum Airspace

Restrictions on operations in Minimum Navigation Performance Specification or Reduced Vertical Separation Minimum

143. (1) An operator shall not permit an aircraft of Trinidad and Tobago 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 authorization of the Authority.

(2) Where an operator wishes to apply to operate an aircraft under the conditions set out in subregulation (1), he shall apply to the Authority in the prescribed form.

(3) An operator shall not 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.

Operations on or in the Vicinity of an Uncontrolled Aerodrome

Requirements where operations are conducted on or in the vicinity of an uncontrolled aerodrome

144. (1) A pilot of an aircraft operated on or in the vicinity of an aerodrome shall, whether or not within an aerodrome traffic zone—

(a) observe other aerodrome 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 aerodrome without an operating control tower, each pilot of—

(a) an aeroplane shall make all turns to the left or shall comply with any traffic patterns established by the civil aviation authority having jurisdiction over that aerodrome; and

(b) a helicopter shall avoid the pattern of traffic flow of aeroplanes.

(3) When departing an aerodrome 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 aerodrome.

(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.

Aerodrome Traffic Pattern Altitudes for Turbojet, Turbofan, or Large Aircraft

Required altitudes for turbojet, turbofan or large aircraft on entering aerodrome traffic pattern

145. (1) When arriving at an aerodrome, 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 aerodrome, 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

Compliance with visual and electronic glide slopes

146. (1) The pilot in command of an aircraft 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.

Commercial Air Transport Operations Restriction or Suspension of Operations

Restriction or suspension of operations for commercial air transport operations

147. Where a pilot in command or an air operator knows of conditions, including aerodrome and runway conditions, that are a hazard to safe operations, such person shall restrict or suspend all commercial air transport operations to such aerodromes and runways as necessary until those conditions are corrected.

Continuation of Flight in Commercial Air Transport Operations when Destination Aerodrome is Temporarily Restricted

Continuation of flight in commercial air transport when destination aerodrome is temporarily restricted

148. A pilot in command shall not allow a flight to continue toward any aerodrome 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.

Interception of Civil Aircraft

Requirements where interception occurs

149. (1) Interception of civil aircraft by a military aircraft of an armed force of Trinidad and Tobago shall be conducted in a manner—

(a) to have due regard for the safety of navigation of civil aircraft; and

(b) as prescribed by the Authority.

(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 Schedule 6.

Schedule 6

Air Traffic Control Clearances

Requirements for Air Traffic Control clearances

150. (1) A pilot in command shall obtain an Air Traffic Control clearance prior to operating a controlled flight, or any portion thereof.

(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 aerodrome shall not taxi on the manoeuvring area or any runway without clearance from the aerodrome control tower.

Adherence to Air Traffic Control Clearances

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.

(4) A pilot in command may amend his Air Traffic Control clearance at any time but shall not operate under such amended clearance until it has been accepted by the Air Traffic Control Facility.

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. Communication requirements

(2) Regulations for communication failure in Visual Meterological 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.

Route to be flown

Pilot in command to fly along assigned route

153. (1) Unless otherwise authorized or directed by the appropriate Air Traffic Control Facility, a pilot in command of a controlled flight shall, as far as practicable—

(a) when on an established Air Traffic Control route, operate along the defined center line of that route; or

(b) when on 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 subregulation (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.

Inadvertent Changes to Route

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 five 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 aerodrome, whichever comes first, is found to be in excess—

(i) of three 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.

Intended Changes for Air Traffic Control Clearance

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 aerodrome including related flight plan data beginning with the position from which the requested change of route is to commence, revised time estimates, alternate aerodrome and any other pertinent information.

Position Reports

Requirements 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 aerodrome, advise the appropriate Air Traffic Control Facility as soon as it ceases to be subject to Air Traffic Control Services.

Operations on or in the Vicinity of a Controlled Aerodrome

Procedures where operations are conducted on or in the vicinity of a controlled aerodrome

157. (1) An operator shall ensure that an aircraft is not operated to, from, through, or on an aerodrome having an operational control tower unless two-way communications are maintained between that aircraft and the control tower.

(2) On arrival at an aerodrome, a pilot in command shall establish communications required by subregulation (1), at least four nautical miles distance from the aerodrome when operating from the surface up to and including 2,500 feet.

(3) When departing an aerodrome, a pilot in command shall establish communications with the control tower prior to taxi.

(4) A person shall not, at any aerodrome 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 authorizes 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 aerodrome authorizes 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 aerodrome 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 aerodrome.

Unlawful Interference

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 crew member or 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 Checks

159. (1) A pilot in command shall use, in flight operations Coordinated Universal Time, expressed in hours and minutes of the twenty-four hour day beginning at midnight. Time checks requirements

(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

160. (1) An operator shall ensure that procedures to be followed upon the observation or reception of the designated universal aviation signals are established. Universal signals requirements

(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 Schedule 7. Schedule 7

(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 Requirements and Navigation

161. Navigation for flights under Visual Flight Rules shall be accomplished by visual reference to landmarks. Visual Flight Rules and navigation requirements

Visual Meteorological Conditions

162. An operator shall ensure that an aircraft is not operated under Visual Flight Rules when— Restrictions on operations under Visual Meteorological conditions

(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 Schedule 8 exists. Schedule 8

Visual Flight Rules Weather Minima for Take-off and Landing

163. (1) A pilot shall not enter the traffic pattern, land or take-off an aircraft under Visual Flight Rules from an aerodrome located in Class B, Class C, Class D or Class E airspace unless the— Visual Flight Rules weather minimums for take-off and landing

(a) reported ceiling is at least 1,500 feet; and

(b) reported ground visibility is at least 3 statute miles, where reported.

(2) Where the ground visibility is not reported, the pilot shall conduct such flight as if flight visibility is 3 statute miles.

(3) Where an aerodrome 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 statute mile and the aeroplane can be operated clear of clouds within one-half 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 Operations

Special Visual Flight Rules Operations

164. (1) A pilot shall not conduct a Special Visual Flight Rules flight operation to enter the traffic pattern, land or take-off an aeroplane under Special Visual Flight Rules from an aerodrome located in Class B, Class C, Class D or Class E airspace unless—

(a) given clearance by an Air Traffic Control Authority;

(b) the aircraft remains clear of clouds; and

(c) the flight visibility is at least 1 statute mile.

(2) A pilot shall not conduct a Special Visual Flight Rules flight operation in an aircraft between sunset and sunrise unless authorized by the appropriate Air Traffic Control Authority 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 Cruising Altitudes

Visual Flight Rules 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 subregulation (1) only when—

(a) authorized by the Air Traffic Control Authority;

(b) operating in a holding pattern; or

(c) manoeuvring in turns.

Air Traffic Control Clearances for 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— Requirement to comply with Air Traffic Control clearances for Visual Flight Rules flights

(a) within Classes B, C and D airspace;

(b) as part of aerodrome traffic at controlled aerodromes; and

(c) under Special Visual Flight Rules as prescribed under regulation 167.

Visual Flight Rules Flights Requiring Air Traffic Control Authorization

167. Unless authorized by the appropriate Air Traffic Control Authority, a pilot shall not operate in Visual Flight Rules flight— Requirement to have Air Traffic Control Authorization for Visual Flight Rules flights

(a) above Flight Level 200; or

(b) at transonic and supersonic speeds.

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— Procedure where there is weather deterioration below Visual Meteorological Conditions

(a) request an amended clearance enabling the aircraft to continue in Visual Meteorological Conditions to its destination or to an alternative aerodrome, 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 aerodrome;

(c) where operating within a control zone, request authorization 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

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

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 aerodrome; and

(c) report arrival to Air Traffic Control Facility by the most expeditious means possible.

Instrument Flight Rules Flights in Controlled Airspace

Restrictions on Instrument Flight Rules flights in controlled airspace

171. A pilot shall not operate an aircraft in controlled airspace under Instrument Flight Rules unless he has—

(a) filed an Instrument Flight Rules flight plan; and

(b) received an appropriate Air Traffic Control clearance.

Instrument Flight Rules Flights Outside Controlled Airspace

Procedures for Instrument Flight Rules Flights outside controlled airspace

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—

(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.

Instrument Flight Rules Take-off Minima for Commercial Air Transport Operations

Procedures for Instrument Flight Rules take-off minima for commercial air transport

173. Unless otherwise authorized by the Authority, a pilot operating an aircraft in commercial air transport operations shall not accept a clearance to take-off from a civil aerodrome under Instrument Flight Rules unless weather conditions are at or above—

(*a*) 1 statute mile visibility for aircraft, other than helicopters, having two engines;

(*b*) statute mile visibility for aircraft having more than two engines; or

(*c*) statute mile visibility for helicopters.

Minimum Altitudes for Instrument Flight Rules Operations

Restrictions on take-off or landing under Instrument Flight Rules Operations

174. (1) Except where necessary for take-off or landing a person shall not 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 subregulation (1), 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 twenty-two 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 under subregulation (4), applies, at or above the applicable Minimum Clearance Altitude.

Minimum Altitudes for Use of an Autopilot

Minimum altitudes for use of an autopilot

175. (1) For en-route operations, a pilot shall not 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 under subregulation (1), when multiplied by two 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 under subregulation (3) when multiplied by two is more than 50 feet, then such altitude becomes the controlling minimum altitude for use of the autopilot.

(5) The Director General may recommend that the Authority approve the use of a flight control guidance system with automatic landing capability to touchdown and rollout.

Instrument Flight Rules, Cruising Altitude or Flight Level in Controlled Airspace

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

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 odd 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 subregulation (1), only when—

(a) authorized by the Air Traffic Control Authority;

(b) operating in a holding pattern; or

(c) manoeuvring in turns.

Instrument Flight Rules Radio Communications

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.

Malfunction Reports for Operation Under Instrument Flight Rules in Controlled Airspace

Requirement for malfunction reports for operation under Instrument Flight Rules in controlled airspace

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.

(2) A pilot in command shall include in his report under subregulation (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.

Continuation of Instrument Flight Rules Flight Toward a Destination

Continuation of Instrument Flight Rules Flight toward a destination

180. A pilot shall not continue an Instrument Flight Rules flight toward an aerodrome or heliport of intended landing, unless the latest available meteorological information indicates that the conditions at that aerodrome, or at least one destination alternate aerodrome will, at the expected time of arrival, be at or above the specified instrument approach minima.

Instrument Approach Procedures and Instrument Flight Rules Landing Minima

Instrument approach procedures and Instrument Flight Rules landing minimums

181. (1) A person shall not make an instrument approach at an airport except in accordance with Instrument Flight Rules weather minima and instrument approach procedures set forth in the operations specifications of the air operator.

(2) The instrument approach under subregulation (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.

Commencing an Instrument Approach

Commencing an instrument approach

182. (1) The pilot in command or the pilot to whom conduct of a flight has been delegated may commence an instrument approach regardless of the reported runaway visual range or visibility but such

instrument approach shall not be continued beyond the outer marker, or equivalent position, where the reported runaway visual range or visibility is less than the applicable minima.

(2) Where after passing the outer marker or equivalent position in accordance with subregulation (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 aerodrome on the final approach segment.

Instrument Approaches to Civil Aerodromes

Procedures for instrument approaches to civil aerodromes

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 aerodrome, unless otherwise authorized 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 authorized 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.

Operation Below Decision Height or Minimum Decent Altitude

Requirements for operation below decision height or minimum decent altitude

184. (1) Where a decision height or minimum decent altitude is applicable, a pilot shall not operate an aircraft at any aerodrome or heliport below the authorized minimum decent altitude or continue an approach below the authorized 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 under subregulation (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 III operations.

Landing During Instrument Meteorological Conditions

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.

Execution of a Missed Approach Procedure

Requirements for landing during Instrument Meteoro-logical 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 decent 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 aerodrome is not distinctly visible to the pilot during a circling manoeuvre at or above minimum decent height, unless the inability to see an identifiable part of the aerodrome results only from a normal bank of the aircraft during the circling approach.

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. Procedure where change from Instrument Flight Rules flight to Visual flight Rules flight

(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.

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— Procedure where two-way radio communications failure in Instrument Flight Rules

(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-further-clearance 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-further-clearance 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 VIII

PASSENGERS AND PASSENGER HANDLING

Unacceptable conduct of passenger

189. (1) A person on board an aircraft shall not 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) A person on board an aircraft shall not recklessly or negligently act or omit to act in such a manner as to endanger the aircraft or persons and property therein.

(4) A person shall not conceal himself or cargo on board an aircraft.

(5) A person shall not smoke—

(a) while the no-smoking sign is lit; or

(b) in any aircraft lavatory.

(6) A person shall not tamper with, disable or destroy any smoke detector installed in any aircraft lavatory.

(7) A person shall not enter in 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.

(9) A person who contravenes any of the provisions of this regulation is guilty of an offence and is liable on summary conviction to a fine of twenty-five thousand dollars and imprisonment for one year.

Refuelling or Defuelling with Passengers Embarking on Board or Disembarking

Requirements 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) A pilot in command shall not 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) he complies with the operational procedures under subregulation (1) established by the operator.

(3) Unless specifically authorized by the Authority, a national air operator shall not allow a helicopter to be refueled or defuelled when—

(a) passengers are embarking or disembarking; or

(b) the engine is running or the rotors are turning.

Passenger Seats, Safety Belts and Shoulder Harnesses

Required passenger seats, safety belts and shoulder harnesses

191. (1) A person shall not 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 subregulations (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 Authority, 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 Authority, 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 subregulation (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.

Passenger Briefing

Required passenger briefing

192. (1) An operator shall establish procedures in his Operations Manual to ensure that—

(a) passengers are given a verbal briefing about safety matters; and

(b) passengers 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.

In-flight Emergency Instruction

Required in-flight emergency instruction

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.

Minimum Supply and Use of Passenger Oxygen

Minimum supply and use of passenger oxygen

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 Authority 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.

Passenger Medication

Exceptions to use of medication by passenger

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.

Passenger Access

Restricted areas of access of passengers

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 to any part of the aircraft:

(a) for the purpose of taking action necessary for the safety of the aircraft or of any person, animal or goods therein; or

(b) in 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. Applicability of regulations 198 to 219

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

Denial of Transportation of Certain Categories of Passengers

199. (1) A national air operator shall not 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 subregulation (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 Authority; or

(b) has a handicap that can be physically accommodated only by an exit row seat.

Carriage of Persons without Compliance with Certain Passenger-Carrying Requirements

200. The passenger-carrying requirements for— Exemptions of certain passenger-carrying requirements

(a) megaphones as specified in the Civil Aviation [(No. 7) Instruments and Equipment] Regulations, 2004;

(b) passenger briefing as specified in regulations 214 and 215;

(c) locking of cockpit compartment door in regulation 58,

shall not apply in commercial air transport operations where an aircraft is carrying only—

(d) a crew member not required for the flight;

(e) a representative of the Authority on official duty;

(f) a person necessary to the safety or security of cargo or animals; or

(g) any person authorized by the Operations Manual of the national air operator, as approved by the Authority.

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. Cabin crew at duty stations

(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.

Evacuation Capability

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 Authority, the necessary functions to be performed by the crew members in an emergency or a situation requiring emergency evacuation for each type of aircraft.

Arming of Automatic Emergency Exits

Prohibition in respect of armed emergency exit

203. A person shall not cause an aircraft carrying passengers to be moved on the surface, take-off or land unless each automatically deployable emergency evacuation assisting means installed on the aircraft, is armed and ready for evacuation.

Accessibility of Emergency Exits and Equipment

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.

Stops Where Passengers Remain on Board

Pilot in command or senior cabin crew to ensure

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, 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.

Carriage of Persons with Reduced Mobility

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.

Carriage of Inadmissible Passengers, Deportees or Persons in Custody

Requirements for 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 under subregulation (1), are to be carried on board.

Exit Row Seating

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.

Carriage of Weapons

Restriction on carriage of weapons

209. (1) A person shall not, while on board an aircraft, carry on or about his person a firearm, weapon or munitions of war, either concealed or unconcealed.

(2) A person who contravenes subregulation (1), is guilty of an offence and is liable on summary conviction to a fine of five thousand dollars and imprisonment for two years.

(3) This regulation shall not apply to an air marshal authorized to be on board an aircraft in accordance with the Civil Aviation [(No. 8) Aviation Security] Regulations, 2004.

Oxygen for Medical Use by Passengers

Requirements for oxygen for medical use by passengers

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 Authority.

(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.

Carry-on Baggage

Restrictions on carry-on baggage

211. (1) An air operator shall not 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.

(2) An air operator shall not 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) An air operator shall not allow carry-on baggage to be stowed in a location that would cause such location to be loaded beyond its maximum placard weight limitation.

Carriage of Cargo in Passenger Compartments

212. A national air operator shall not allow the carriage of cargo in the passenger compartment of an aircraft except under conditions approved by the Authority.

Prohibition on carriage of cargo in passenger compartment

Smoking on Board Prohibition

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.

Passenger Briefings

214. (1) A pilot in command of an aircraft shall not 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—

Requirement to brief passengers prior to take-off in commercial air transport operations

(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 and where flight is above 12,000 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 subregulation (4), a pilot in command shall ascertain that the proper briefing required by this regulation has been conducted prior to take-off.

Passenger Briefing for Extended Over Water Operations

Requirement to brief 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.

Passenger Seat Belts and Information Signs

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.

Passenger Seat Backs

Requirement for seat backs to be upright prior to take-off and landing

217. (1) A pilot in command of an aircraft shall not 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.

Stowage of Food, Beverage and Passenger Service

Restrictions of movement in respect of stowage of food and beverage

218. (1) A pilot in command shall not operate an aircraft on the surface, take-off or land—

(a) when any food, beverage or tableware is located at any passenger seat;

(b) unless each food and beverage tray and seat back tray table is in the stowed position;

(c) unless each passenger serving cart is secured in its stowed position; and

(d) 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 or is taking off and landing—

(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.

Securing of Items of Mass in Passenger Compartment

Requirements to secure items of mass in passenger compartment

219. A national air operator shall ensure that prior to 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 IX

CREW MEMBER AND FLIGHT OPERATIONS OFFICER QUALIFICATIONS FOR COMMERCIAL AIR TRANSPORT

Applicability of Part IX

Applicability of Part IX

220. Notwithstanding the generality of Part IX of these Regulations the provisions of this Part shall apply to the conduct of commercial air transport operations.

Age and Special Medical Certificate Restriction

Age and special medical certificate restriction

221. (1) A person shall not serve nor shall any national air operator use a person as a required pilot flightcrew member on a commercial aircraft where such person has reached his sixtieth birthday.

(2) A check airman who has—

(a) reached his sixtieth 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 flightcrew member on an aircraft engaged in commercial air transport operations.

(3) Notwithstanding subregulations (1) and (2)*(a)*, the holder of a pilot licence who is between the age of sixty and sixty-three years may serve as a member of a multi-pilot crew on an aircraft engaged in commercial air transport operations where:

(a) no other flightcrew member on board has attained the age of sixty years; and

(b) no other flightcrew member is a holder of a Special Medical Certificate issued under the Civil Aviation [(No. 1) General Application and Personnel Licensing] Regulations, 2004.

(4) The holder of a Special Medical Certificate issued under the Civil Aviation [(No. 1) General Application and Personnel Licensing] Regulations, 2004 shall not serve as, or occupy the position of a required flightcrew member on an aircraft engaged in commercial air transport operations.

(5) Notwithstanding subregulation (4), the holder of a Special Medical Certificate may act as a member of a multi-pilot crew where:

(a) no other flightcrew member has attained the age of sixty years, and

(b) no other flightcrew member is a holder of a Special Medical Certificate.

Licence Requirements for Turbojet, Turbofan or Large Aircraft

Pilot in command requirements for turbojet, turbofan or large aircraft

222. A pilot shall not 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 [(No. 1) General Application and Personnel Licensing] Regulations, 2004.

Licence Requirements for Non-Turbojet or Turbofan Small Aircraft

223. A pilot shall not act as pilot in command of a non-turbojet or non-turbofan small aircraft in commercial air transport during— Pilot in command requirements for non-turbo or turbofan

(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.

Experience Requirements for Pilot in command in respect of Small Aeroplane

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 when conducting passenger carrying operations under Visual Flight Rules, he has a minimum of five hundred hours total flight time including at least one hundred hours of cross country flight time of which twenty-five hours were at night on aeroplanes or, for operations under Instrument Flight Rules, holds a valid Instrument Rating. Aeronautical Experience Requirements for Pilot-in-Command in respect of small aeroplanes

Co-pilot Licence Requirements

225. A pilot shall not act as co-pilot of an aircraft in commercial air transport operations unless he— Co-pilot licence requirements

(a) holds a Commercial Pilot Licence with appropriate category, class and type ratings for the aircraft operated; and

(b) holds an instrument rating.

Flight Engineer Licence Requirements

226. (1) A person shall not 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 flightcrew shall comprise at least one Flight Engineer unless those duties can, with the approval of the Authority, be satisfactorily performed by another flightcrew member without interfering with that flightcrew member's regular duties.

Alternate to Perform Flight Engineer Functions

Requirements for Flight Engineer competency

227. A national air operator shall ensure that, on all flights requiring a Flight Engineer, there is assigned at least one other flightcrew member competent to perform the flight duties in the event the Flight Engineer becomes incapacitated.

Persons Qualified to Flight Release

Requirements for Flight Operations Officer

228. A person shall not act as a Flight Operations Officer in releasing a scheduled passenger-carrying commercial air transport operation unless he has a valid Flight Operations Officer Authorization issued in accordance with the Civil Aviation [(No. 1) General Application and Personnel Licensing] Regulations, 2004.

Company Procedures Indoctrination

Requirement for crew member or Flight Operations officer to complete Company Procedures Indoctrination Schedule 9 Part A

229. (1) A person shall not 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 Authority, 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 Part A of Schedule 9.

(2) A national air operator shall provide a minimum of forty programmed hours of instruction for company procedures indoctrination training unless a reduction in the number of programmed hours is approved by the Authority.

Initial Dangerous Goods Training

Requirement for initial dangerous goods training

230. A person shall not 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 Authority and described in the Technical Instructions.

Initial Security Training

Initial security training

231. A person shall not 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 Authority.

Initial Crew Resource Management Training

Requirement for initial crew resource training

232. (1) A person shall not 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 such person has completed the initial Crew Resource Management Training Programme including—

(a) proper flightcrew co-ordination and incapacitation procedures;

(b) effective flightcrew and cabin crew co-ordination; and

(c) knowledge about human performance relating to passenger cabin safety duties,

as approved by the Authority.

Schedule 9 Part B

(2) The Crew Resource Management Training programme under subregulation (1), shall meet the requirements of Part B of Schedule 9.

Initial Emergency Equipment Drills

Initial emergency equipment drills

233. (1) A person shall not 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 and approved by the Authority 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.

Schedule 9 Part C

(2) The emergency and life saving equipment drills under subregulation (1), shall meet the requirements set out in Part C of Schedule 9.

Initial Aircraft Ground Training

Required initial aircraft ground training

234. (1) A person shall not 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 Authority for the aircraft type.

(2) Initial aircraft ground training under this regulation for flightcrew members shall include—

(a) 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 flightcrew 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 Authority, which recognize the experience levels of flightcrew 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 fulfillment 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 Part D of Schedule 9.

Schedule 9 Part D

Initial Aircraft Flight Training

Initial aircraft flight training

235. (1) A person shall not serve nor shall any national air operator use a person as a flightcrew member unless he has completed the initial flight training approved by the Authority for the aircraft type, which ensures that all flightcrew 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 flightcrew members approved by the Authority.

(4) The initial aircraft flight training under this regulation shall meet the requirements of Part E of Schedule 9.

Schedule 9 Part E

Initial Specialized Operations Training

Initial specialized operations training

236. (1) A person shall not serve and a national air operator shall not use a person as a flightcrew member in commercial air transport operations unless he has completed the appropriate initial specialized operations training programme approved by the Authority.

(2) Specialized operations under subregulation (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 subregulation (2), the initial specialized operations training under this regulation shall meet the requirements of Part F of Schedule 9.

Schedule 9 Part F

Difference and Familiarization Training

Requirement for flightcrew member to complete difference and familiarization training

237. (1) A national air operator shall ensure that a flightcrew 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—

(i) when operating another aircraft of the same type; or

(ii) when 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 under subregulation (1), is required.

Use of Flight Simulators

Requirements when aircraft simulators are used

238. A national air operator shall ensure that an aircraft simulator and other training device used for flightcrew qualification shall—

(a) be specifically approved by the Authority 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 flightcrew 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.

Conversion Training and Checking

Requirements for flightcrew conversion training and checking

239. (1) A national air operator shall ensure that—

(a) flightcrew complete a Type Rating course which satisfies the applicable requirements of the Civil Aviation [(No. 1) General Application and Personnel Licensing] Regulations, 2004 when changing from one type of aircraft to another type or class for which a new type or class rating is required;

(b) flightcrew complete the approved conversion course before commencing unsupervised line flying—

(i) when changing to an aircraft for which a type or class rating is required; or

(ii) when changing national air operators;

(c) conversion training acceptable to the Authority is conducted by a suitably qualified person in accordance with a detailed course syllabus included in the Operations Manual;

(d) the amount of training required by his conversion course is determined after due note has been taken of the previous training of the flightcrew member from records prescribed by the Act or Regulations made thereunder;

(e) the minimum standards of qualification and experience required for flightcrew before undertaking conversion training are specified in the Operations Manual;

(f) flightcrew undergo the operator proficiency check and emergency and safety equipment training and checks before commencing line flying under supervision;

(g) upon completion of line flying under supervision, successfully completes the line check;

(h) once a flightcrew member has commenced the conversion course of the national air operator he does not undertake flying duties on another type or class until the course is completed or terminated; and

(i) crew resource management training is incorporated in the conversion course.

(2) The conversion course of the national air operator and the Type or Class Rating course required for the issue of flightcrew licences may be combined.

(3) A national air operator shall ensure that his cabin crew has completed the appropriate training, as specified in the Operations Manual, before undertaking assigned duties.

(4) The training required under subregulation (3), shall comprise—

(a) conversion training which shall be completed before being—

(i) first assigned by the national air operator to operate as a cabin crew member; or

(ii) assigned to operate 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 under subregulation (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 Authority.

Schedule 9 Part G

(8) A conversion and differences training programme under this regulation shall meet the requirements of Part G of Schedule 9.

Aircraft and Instrument Proficiency Checks

Restrictions on the use by the national air operator of persons as flightcrew

240. (1) A person shall not serve and a national air operator shall not use a person as a pilot flightcrew member unless, since the beginning of the sixth calendar month before such service, such person has passed the proficiency check prescribed by Authority in the make and model of aircraft on which his services is required.

(2) A person shall not 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 twelfth month before that service, such person has passed the instrument proficiency check prescribed by the Authority.

(3) The proficiency check under subregulation (2), shall ensure that 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 subregulations (1) and (2) simultaneously in a specific aircraft type.

(5) The proficiency check under subregulation (1) shall be in the areas set out in Part H of Schedule 9. Schedule 9 Part H

Nomination as Pilot in Command

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— Nomination as pilot in command

(a) a minimum level of experience, acceptable to the Authority, is specified in the Operations Manual; and

(b) for multi-crew operations, the pilot completes a command course acceptable to the Authority.

(2) The command course required by subregulation (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 ten 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 specified under regulations 232 and 239, respectively.

Qualifications to Operate in either Pilot's Seat

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. Required qualifications to operate in either pilot's seat

(2) In developing the training and checking programmes under subregulation (1), the national air operator shall take into consideration the matters set out in Part I of Schedule 9. Schedule 9 Part I

Re-establishing Recency of Experience by a Pilot

Re-establishing recency of experience by a pilot

243. (1) In addition to meeting all applicable training and checking requirements of these Regulations, a required pilot flightcrew member who, in the preceding ninety days has not made at least three 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 three 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, flightcrew 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 flightcrew member shall certify that the person being observed is proficient and qualified to perform flight duty in line flight operations.

(4) The ninety days prescribed in subregulation (1), may be extended up to a maximum of one hundred and twenty days where the pilot completes line flying under supervision of Flight Instructor or check airman.

(5) For a period in excess of one hundred and twenty days specified under subregulation (4), the recency requirement shall be satisfied by a training flight in a Flight Simulator or aircraft of the type to be used.

Operations on More than One Type or Variant of Aircraft

Requirements for operations on more than one type or variant of aircraft

244. (1) An national air operator shall ensure that a flightcrew 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 Authority 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 flightcrew 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 Authority 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 Authority, for any operation on more than one type or variant covering—

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

(b) the process by which flightcrew 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.

Operation of Helicopters and Aeroplanes

Restrictions on operation of helicopters and aeroplanes

245. A national air operator shall ensure that where a flightcrew member is qualified to operate both helicopters and aeroplane—

(a) his operation of such helicopters and aeroplanes are limited to one type of each;

(b) appropriate procedures and operational restrictions, approved by the Authority, are specified in the Operations Manual of the national air operator.

Training Records

Requirement for the maintenance of training records

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 under subregulation (1), shall be made available to the relevant crew member or Flight Operations Officer upon request.

Pairing of Low Experience Crew members

Requirement for the pairing of low experience crew members

247. (1) Where a co-pilot has fewer than one hundred 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 Authority.

(2) A pilot in command or co-pilot shall not conduct commercial air transport operations in a particular type aircraft in commercial air transport operations unless either pilot has at least seventy-five hours of line operating flight time, either as pilot in command or co-pilot.

(3) Where a national air operator wishes to deviate from subregulation (2), he shall follow the deviation procedures set out in the Civil Aviation [(No. 1) General Application and Personnel Licensing] Regulations, 2004.

(4) Notwithstanding the sixty days notification requirement under the Civil Aviation [(No. 1) General Application and Personnel Licensing] Regulations, 2004, where the Director General 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 recommend the Authority authorize a deviation from subregulation (2), by an appropriate amendment to the operations specifications.

Flight Engineer Proficiency Checks

Requirement of Flight Engineer proficiency checks

248. (1) A person shall not 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 six calendar months he has—

(a) successfully completed a proficiency check in accordance with the requirements prescribed by the Authority; or

(b) recorded fifty 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 Part J of Schedule 9.

Schedule 9 Part J

Competency Checks for Cabin crew

Requirement for competency checks for cabin crew

249. (1) A person shall not serve and a national air operator shall not use a person as a cabincrew unless, since the beginning of the twelfth calendar month before such service, such person has passed the competency check prescribed by the Authority 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 Authority.

(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 Part K of Schedule 9. Schedule 9 Part K

Competency Checks for Flight Operations Officers

250. (1) A person shall not 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, such person has passed the competency check, prescribed by the Authority, performing the flight preparation and supervision appropriate to the assignment of such person. Requirement for competency checks for Flight Operations Officers

(2) The competency check under this regulation shall be—

(a) performed by a suitably qualified Flight Operations Officer Instructor acceptable to the Authority; and

(b) test the Flight Operations Officer on the areas specified in Part L of Schedule 9. Schedule 9 Part L

Supervised Line Flying for Pilots

251. (1) A pilot initially qualifying as pilot in command shall operate a minimum of ten sectors performing the duties of pilot in command under the supervision of a check airman. Requirements for supervised line flying for pilots

(2) A pilot in command transitioning to a new aircraft type shall complete a minimum of five 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 five 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 two 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.

Supervised Line Flying for Flight Engineers

Requirements for supervised line flying for Flight Engineers

252. A person qualifying as a Flight Engineer for a particular aircraft type shall perform in such capacity for a minimum of five flights under the supervision of a check airman.

Supervised Line Experience for Cabin Crew

Requirements for supervised line experience for cabin crew

253. (1) A person qualifying as a cabincrew shall perform in such capacity for a minimum of two sectors under the supervision of a senior cabin crew.

(2) In qualifying as a cabin crew under subregulation (1), the areas of operations required for supervised line experience are set out in Part M of Schedule 9.

Schedule 9 Part M

Cabin Crew Familiarization

Familiarization requirements for cabin crew

254. A national air operator shall ensure that cabin crew upon—

(a) completion of conversion training; and

(b) prior to operating as one of the minimum member of the required cabin crew,

undergo aircraft familiarization training.

Line Observations for Flight Operations Officers

Line observations for Flight Operations Officers

255. A person shall not serve and a national air operator shall not use a person as a Flight Operations Officer unless, since the beginning of the twelfth month before such service, such person has observed, on the cockpit, the conduct of a one way flight over routes representative of those for which such person is assigned duties.

Route and Airport Qualification for Pilot in Command

Route and airport qualification for pilot in command

256. (1) An air operator shall not utilize a pilot as pilot in command of an aircraft on a route segment for which such pilot is not currently qualified until such pilot has complied with this regulation.

(2) A pilot under subregulation (1), shall demonstrate to the national air operator an adequate knowledge of—

(a) the route to be flown and the aerodromes 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 flight paths over heavily populated areas and areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, and applicable operating minima.

(3) Where a pilot in command has not made an actual approach into an aerodrome of landing on the route, an initial approach to such aerodrome by such pilot in command must be made with a pilot who is qualified for that aerodrome, as a member of the flightcrew or as an observer on the cockpit.

(4) The provisions of subregulation (3), in respect of the presence of a pilot who is qualified for the aerodrome shall not apply where—

(a) the approach to the aerodrome is not over difficult terrain and the instrument approach procedures and aids available are similar to those with which the pilot is familiar, and a margin to be approved by the Authority is added to the normal operating minima, or there is reasonable certainty that approach and landing can be made in visual meteorological conditions; or

(b) the descent from the initial approach altitude can be made by day in visual meteorological conditions; or

(c) the national air operator qualifies the pilot in command to land at the aerodrome concerned by means of adequate pilot in command pictorial presentation; or

(d) the aerodrome concerned is adjacent to another aerodrome at which the pilot in command is currently qualified to land.

(5) A national air operator shall not continue to utilize a pilot in command on a route unless, within the preceding twelve months, such pilot has made at least one trip between the terminal points of that route as a pilot member of the flightcrew, or as a check airman, or as an observer in the cockpit.

(6) Where a pilot has not within the preceding twelve months made a trip on a route under subregulation (5), or on a route in close proximity and over similar terrain, he shall before serving as a pilot in command on such 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 Authority, of the qualification of the pilot in command and of the manner in which such qualification has been achieved for satisfying the requirements of this regulation.

Route and Area Checks for Pilot Qualification

Required route and area checks for pilot qualification

257. (1) A person shall not serve and a national air operator shall not use a person as a pilot in commercial air transport operations unless, within the preceding twelve months, such 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) A person shall not perform pilot in command duties in commercial air transport operations—

(a) over a designated special operational area that requires a special navigation system or procedures; 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 twelve 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.

Pilot in Command Low Minima Authorization

Pilot in command low minimums authorization

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 1 statute mile, the pilot in command

assigned on such flight has prior to flight performed fifteen sectors performing pilot in command duties in the aircraft type which shall include five approaches to land using Category I or Category II procedures.

(2) A pilot in command shall not plan for or initiate an instrument approach when the ceiling is less than 300 feet and the visibility is less than one statute mile unless he has, prior to such flight completed fifteen sectors performing the duties of pilot in command in the aircraft type which included five 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 such flight has prior to flight completed twenty sectors performing pilot in command duties in the aircraft type which shall include 5 approaches to land using Category III procedures.

(4) A pilot in command shall not 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 twenty sectors performing pilot in command duties in the aircraft type, which included completing five approaches and landings using Category III procedures.

Pilot in Command Qualification for Designated Special Aerodromes and Heliports

Required pilot in command qualifications for designated special aerodromes and heliports

259. (1) A person shall not serve nor shall any national air operator use a person as pilot in command in commercial air transport operations at designated special aerodromes and heliports unless within the preceding twelve months—

(a) the pilot in command has received a briefing from the national air operator on such operations for that aerodrome, through pictorial means acceptable to the Authority; or

(b) the pilot in command or the assigned second in command has made a take-off and landing at that aerodrome while serving as a flightcrew member for the national air operator.

(2) Designated special aerodrome and heliport limitations under subregulation (1), are not applicable where the operation will occur—

(a) during daylight hours;

(b) when the visibility is at least 3 statute miles; and

(c) when the ceiling at that aerodrome is at least 1,000 feet above the lowest initial approach altitude prescribed for an instrument approach procedure.

Flightcrew Members Recurrent Training and Checking

Required recurrent training and checking for flightcrew-members

260. (1) A national air operator shall ensure that—

(a) each flightcrew 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 flightcrew member operates;

(b) a recurrent training and checking programme is established in the Operations Manual of the national air operator, and approved by the Authority;

(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 Authority, 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 Authority; and

(iii) emergency and safety equipment checks shall be conducted by suitably qualified personnel.

(2) A national air operator shall ensure that—

(a) flightcrew undergo proficiency checks to assess competency in carrying out normal, abnormal and emergency procedures;

(b) the proficiency check under paragraph (a) is conducted without external visual reference when the flightcrew member will be required to operate under Instrument Flight Rules; and

(c) flightcrew undergo proficiency checks as part of a normal flightcrew complement.

(3) The period of validity of a proficiency check shall be six 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 four concecutive months shall not alone satisfy this requirement.

(5) A national air operator shall ensure that each flightcrew 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 under subregulation (5), shall be the remainder of the month of which such check is issued plus twelve months thereafter.

(7) Where a new line check is issued within the final three 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 twelve 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 under subregulation (8), shall be the remainder of the month in which the check is issued plus twelve months thereafter.

(10) Where an emergency and safety equipment check is issued within the final three 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 twelve 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; and

(b) each flightcrew member undergoes specific modular Crew Resource Management training;

(c) all major topics of Crew Resource Management training shall be covered over a period not exceeding three years.

(12) A national air operator shall ensure that each flightcrew member undergoes appropriate recurrent training every twelve months.

(13) Where the training under subregulation (11), is conducted within three months prior to the expiry of the twelve months period, the next recurrent training shall be completed within twelve months of the original expiry date of the previous ground and recurrent training.

(14) A national air operator shall ensure that each flightcrew member undergoes flight training in an aircraft or flight simulator every twelve months.

(15) Where the training under subregulation (12), is conducted within three months prior to the expiration of the previous twelve months period, the next flight training shall be completed within twelve months of the original expiration date of the previous flight training.

(16) Recurrent training for flightcrew required by this regulation shall meet the requirements of Part N of Schedule 9.

Schedule 9 Part N

Recurrent Training for Cabin Crew

Recurrent training for cabin crew

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 Authority 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 twelve months thereafter.

(4) Where a new check was issued within the final three months of validity of a previous check, the period of validity of the new check shall extend from the date of issue until twelve 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 Part O of Schedule 9.

Schedule 9 Part O

Re-establishing Recency of Experience for Cabin Crew

Refresher training for cabin crew recurrent training is still valid

262. (1) A national air operator shall ensure that each cabin crew member who has been absent from all flying duties for more than six 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 six 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.

Recurrent Training for Flight Operations Officers

Required recurrent training for Flight Operations Officers

263. (1) A person shall not 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 twelve months that person has completed the recurrent ground training programme approved by the Authority.

(2) The recurrent ground training programme under subregulation (1), shall include training on—

(a) aircraft-specific flight preparation;

(b) emergency assistance to flightcrew;

(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.

Flight Instructor Training

Required Flight Instructor Training

264. (1) A person shall not 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 [(No. 1) General Application and Personnel Licensing] Regulations, 2004;

(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 subregulation (1)(*b*) completes the requirements set out in Part P of Schedule 9.

Schedule 9 Part P

Flight Instructor Qualifications

Qualification Requirements for Flight Instructors

265. A national air operator shall not use a person nor may any person serve as a Flight Instructor in an approved training program unless, with respect to the aicraft type involved, that person—

(a) holds the airman licences and rating required to serve as a pilot in command or a flight engineer, as applicable;

(b) has satisfactorily completed the appropriate training phases for the aicraft, including recurrent training, that are required to serve as a pilot in command or flight engineer, as applicable;

(c) 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, as applicable;

(d) has satisfactorily completed the applicable initial or transitional training requirements and the Authority has observed in-flight competency check; and

(e) holds at least a Class III medical certificate unless serving as a required flightcrew member, in which case holds a Class I or a Class II medical certificate as appropriate.

Check Airman

Restrictions on use of person as check airman

266. (1) A person shall not serve and a national air operator shall not use a person as a check airman unless he has completed the curricula approved by the Authority 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 under subregulation (1) includes the areas set out in Part Q of Schedule 9.

Schedule 9 Part Q

Check Airman Approval

Restriction on use of check airmen

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 Authority as a check airman for a specific function, within the preceding twelve months.

Check Airman Qualifications

Required check airman qualifications

268. A person shall not serve and a national air operator shall not use a person as a check airman in an established training programme unless, with respect to the aircraft type involved, such person—

(a) holds the pilot licences and ratings required to serve as a pilot in command or a Flight Engineer;

(b) has satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required to serve as a pilot in command or Flight Engineer;

(c) 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;

(d) has satisfactorily completed the applicable training requirements and the Authority has observed in-flight competency check;

(e) holds the appropriate medical certificate; and

(f) has been approved by the Authority for the check airman duties involved.

Check Airman Limitations

Check airman limitations

269. A person shall not 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 flightcrew 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 such 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 such person has completed or observed all training, qualification and line observation requirements of these regulations applicable to the position and flight operations being checked.

Substitution of Simulator Experience

Substitution of simulator experience

270. (1) A national air operator shall not 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 Authority.

(2) A national air operator shall not use a flight simulator for any purpose other than that specified in the approval of the Authority.

Line Qualification for Check Airman and Instructor

Required line qualification for check airman and instructor

271. A person shall not 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 twelfth month before that service, such person has—

(a) flown at least five sectors as a required crew member for the type of aircraft involved; or

(b) observed, on the flight deck, the conduct of two complete flights in the aircraft type to which the person is assigned.

Termination of a Proficiency, Competency or Line Check

Termination of a proficiency, competence or line check

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.

Recording of Crew member Qualifications

Recording of crew member qualifications

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 Authority.

(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 Authority.

Monitoring of Training and Checking Activities

Monitoring of training and checking activities

274. (1) To enable adequate supervision of his training and checking activities, a national air operator shall forward to the Authority at least seven 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 Authority; and

(b) proficiency, competency and line checks.

(2) Failure to provide the information required by subregulation (1), may invalidate the training or check and the Authority may require that it be repeated for observation purposes.

Reductions in Requirements

Procedure for the reduction in training requirements

275. (1) A national air operator may submit a request to the Director General 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 General on receipt of a request under subregulation (1), may recommend the Authority authorize 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 under subregulation (1), is for a specific crew member, the written authorization, including the supporting justification, shall be filed in the records which the national air operator maintains for that crew member.

PART X

CREW AND FLIGHT DUTY LIMITATIONS

Rest Periods, Duty and Flight Time Limitations

Definitions of certain terms and applicability of this part

276. (1) This part applies in relation to any duty carried out on behalf of a national air operator by both flightcrew and cabin crew as applicable.

(2) In this Part—

"crew" means flightcrew and cabin crew;

"day" means the period of elapsed time using Coordinated Universal Time or local time that begins at midnight and ends twenty-four hours later at the next midnight;

"dispatch crew" means a fully qualified crew member authorized 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 eight 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;

"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

"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.

Responsibilities of the national air operator

277. (1) A national air operator shall not cause or permit an aircraft to make a flight unless— Responsibilities of national air operator

(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 under paragraph *(a)* is approved by the Authority and subject to such conditions as the Authority thinks fit;

(c) the scheme under 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 under paragraph (b) shall be complied with by every person flying in that aircraft as a member of its crew.

(2) A crew member shall not 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) A crew member shall not 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.

Monitoring System

Monitoring System

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.

Flight Time Limitations

Flight time limitations

279. (1) Subject to subsection (2), a national air operator shall not assign flight time to a flightcrew member and a flightcrew 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) one hundred hours in any twenty-eight consecutive days;

(b) one thousand hours in any three hundred and sixty-five consecutive days; and

(c) eight hours in any twenty-four hours where the flightcrew member conducts single-pilot consecutive hours Instrument Flight Rules flights or single pilot helicopter flights.

(2) Notwithstanding the requirements outlined in subregulation (1), a national air operator may assign a flightcrew member for flight time, and a flightcrew member may accept such an assignment, where the increase in flight time is authorized in the national air operator Certificate.

(3) Subject to regulation 283, a flightcrew 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 flightcrew member has had the rest period required by regulation 280(4).

Flight Duty Limitations and Rest Periods

Flight duty limitations and rest periods

280. (1) Subject to regulations 281 through 283, a national air operator shall not 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 fourteen consecutive hours in any twenty-four consecutive hours.

(2) A crew member shall receive at least twenty-four consecutive hours free from flight duty following three consecutive flight duty time assignments that exceed twelve consecutive hours unless the crew member has received at least twenty-four consecutive hours free from flight duty between each of the three 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

(b) such as to allow the crew member to have a minimum of eight hours of sleep opportunity in suitable accommodation,

whichever is greater.

(5) In computing the minimum rest at subregulation (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 eight consecutive hours of sleep opportunity in suitable accommodation.

(6) Where any of the variables under subregulation (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.

(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 under subregulation (4).

(8) The rest period under subregulation (7) shall not be less than ten hours.

(9) The exercise of his discretion under subregulation (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 under subregulation (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) sixty hours in one week but may be increased to sixty-five hours when a rostered duty covering a series of duty periods, once commenced, is subject to unforeseen delays;

(b) one hundred and five hours in any two consecutive weeks; or

(c) two hundred and ten hours in any four consecutive weeks.

(12) Notwithstanding subregulation (1), the flight duty time applicable to cabin crew may be one hour greater than for flightcrew.

(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 sixteen 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 two qualified cabin crew more than the minimum complement required, extend the flight duty time of such cabin crew on duty to seventeen consecutive hours.

Extension of Flight Duty Time by Split Duty

Extension of flight duty time by split duty

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 one-half the length of the rest period to a maximum of three 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 four 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.

Extension of Flight Duty by Crew Augmentation

Extension of flight duty by crew augmentation

282. (1) The national air operator may where a flight is conducted using an aircraft other than a helicopter, and the number of flightcrew is increased by the addition of at least one qualified flightcrew member, extend the flight duty time to fifteen consecutive hours if—

(a) the additional flightcrew 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 flightcrew member; and

(b) the subsequent minimum rest period is increased by at least two hours.

(2) Where the flightcrew complement is increased by the addition of at least one flightcrew member and a flight relief facility is provided, the division of duty and rest shall be balanced between the flightcrew members.

(3) The flight duty time under subregulation (2), may be extended to—

(a) seventeen consecutive hours, where the flight relief facility is a seat in which case the maximum flight deck duty time for any flightcrew member shall be twelve hours;

(b) twenty consecutive hours, where the flight relief facility is a bunk in which case the maximum flight deck duty time for any flightcrew member shall be fourteen hours;

(c) a maximum of three 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 flightcrew is increased by the addition of at least one flightcrew member in accordance with subregulation (1) or (2), the total flight time accumulated during the flight shall be logged by all flightcrew members for the purposes of calculating the maximum flight times in regulation 279.

Unforeseen Operational Circumstances

Unforeseen operational circumstances

283. (1) Flights shall be planned to be completed within the maximum flight time and maximum flight duty time taking into account—

(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 subsection 280(1) may be exceeded by a maximum of two 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;

(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 Authority on the appropriate form within fourteen days of the return to base of the aircraft.

Delayed Reporting Time

Delayed reporting time

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 three hours, the flight duty time of the crew member is considered to have started three hours after the original reporting time.

Requirements for Time Free from Duty

Requirements for time free from duty

285. (1) A national air operator shall provide each crew member with time free from duty amounting to one period of at least thirty-six consecutive hours within each seven consecutive days or one period of at least three consecutive days within each seventeen consecutive days.

(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 thirty-six consecutive hours within each seven consecutive days or one period of at least three consecutive days within each seventeen consecutive days.

(3) A national air operator shall notify a flightcrew member on reserve of the commencement and duration of his time free from duty.

Positioning Time

Positioning time to count as duty time

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.

Other Flying by Flightcrew members

flightcrew members to inform of other times of flying

287. (1) A flightcrew member shall inform the national air operator and any other employer of his services as a flightcrew 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 under subregulation (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.

(3) Aerial work under subregulation (2) shall include—

(a) flying instruction for which the pilot is remunerated; and

(b) where valuable consideration is given specifically for flying instruction.

(4) A national air operator shall ensure that a pilot employed as a member of a flightcrew shall not exceed the flight time limitation prescribed by these Regulations.

(5) A pilot under subregulation (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.

Crew members on Reserve

Requirements for flightcrew members on reserve

288. (1) A national air operator shall within each twenty-four hour period of operations provide crew members on reserve during such twenty-four hour period, an opportunity to obtain at least eight consecutive hours sleep.

(2) In reserving crew members for duty a national air operator may—

(a) provide the crew member with twenty-four 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 three hours earlier or later than the corresponding time of the preceding designated or actual rest period in the preceding twenty-four hours, nor more than a total of eight hours in any seven consecutive days;

(b) provide the crew member a minimum of ten hours notice of the assignment and shall not assign him to any duty for these ten 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 member with a rest period required by subregulation (1), and the crew member is notified to report for flight duty or the reporting time occurs between 22:00 and 06:00 local time—

(a) the maximum flight duty time shall be ten consecutive hours; and

(b) the subsequent minimum rest period shall be increased by at least one 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.

Flights Crossing more than Four Time Zones

289. (1) A flight or series of flights which terminates more than four one-hour time zones from the point of departure, shall be limited to three sectors and shall be followed by a rest period that is at least equal to the length of the preceding flight duty period.

Requirements for flights crossing more than four time zones

(2) Where a flight referred to in subregulation (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.

Example of Flight Duty Time Schemes

290. Flight duty time schemes for aeroplane and helicopter operations shall be in the manner set out in Schedule 10, as applicable to the operations.

Example of flight and duty time schemes for aeroplane and helicopter operations Schedule 10

PART XI

COMMERCIAL AIR TRANSPORT FLIGHT RELEASE

Applicability

291. This part prescribes the requirements for a person designated by a national air operator to issue a flight release.

Applicability of Part XI

Qualified Persons Required for Operational Control Functions

Qualified persons required for operational control functions

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 Authorization issued in accordance with the Civil Aviation [(No. 1) General Application and Personnel Licensing] Regulations, 2004 or a person with equivalent qualification shall be on-duty at an operations base to perform the operational control functions; and

(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.

Flight Operations Officer

Restrictions on flight operation officer or flight dispatcher

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 twelve months, at least a one-way qualification flight including landings at as many aerodromes as practicable, on the flight deck of an aircraft over any area in which that individual is authorized 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 authorized 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

(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 twelve consecutive months of absence from such duty unless the appropriate retraining is accomplished.

Functions and Duties of Operational Control

294. (1) A Flight Operations Officer or person holding the equivalent qualification, in exercising responsibility for operational control for a national air operator shall— Functions and duties of operational control

(a) authorize the specific flight operation;

(b) ensure that an airworthy aircraft properly equipped for the flight is available;

(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.

(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

(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—

(a) air traffic control;

(b) the meteorological service;

(c) the communications service; or

(d) the national air operator.

Contents of a Flight Release or Operational Flight Plan

Contents of a flight release or operational flight plan

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 organization name;

(b) make, model, and registration number of the aircraft being used;

(c) the flight or trip number, and date of flight;

(d) the name of each crew member;

(e) the departure aerodrome, destination aerodromes, alternates aerodromes and route;

(f) the minimum fuel on board, in imperial or metric measurements;

(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 aerodrome and alternate aerodromes; and

(i) any additional available weather information that the pilot in command considers necessary.

Aircraft Requirements for Flight Release

Requirements for aircraft flight release

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.

(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.

Facilities and Notices to Airmen for Flight Release

Required facilities and notices to airmen for flight release

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.

(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 aerodrome 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 aerodromes for his review of the operational flight plan.

Weather Reports and Forecasts required for Flight Release

Weather reports and forecasts required for flight release

298. (1) A Flight Operations Officer or a person holding equivalent qualification shall not release a flight unless he is thoroughly familiar with reported and forecasted weather conditions on the route to be flown.

(2) A Flight Operations Officer or person holding equivalent qualification shall not release a flight unless he has communicated all information and concerns he may have regarding weather reports and forecasts to the pilot in command.

Flight Release in Icing Conditions

Procedures for fight release in icing conditions

299. (1) A Flight Operations Officer or person holding equivalent qualification shall not 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.

(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 aerodrome of departure, adequate facilities and equipment to accomplish the ground de-icing and anti-icing procedures approved for the national air operator by the Authority.

(3) A national air operator shall ensure that before an aircraft is released in icing conditions the requirements set out in Schedule 11 are met.

Schedule 11

Flight Release under Visual Flight Rules or Instrument Flight Rules

Flight release under Visual Flight Rules or Instrument Flight Rules

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.

Minimum Fuel for Flight Release

Required minimum fuel supply for flight release

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.

Aircraft Loading and Aircraft Performance Requirement for Flight Release

Aircraft loading and performance requirement for flight release

302. A Flight Operations Officer or a person holding equivalent qualification shall not 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.

Amendment or Re-release En-Route Requirement for Flight Release

Amendment or re-release en-route requirements for flight release

303. (1) A Flight Operations Officer or a person holding equivalent qualification and pilot in command who amends a flight release while the flight is en-route shall record the details of such amendment.

(2) A Flight Operations Officer or a person holding equivalent qualification and pilot in command shall not amend the original flight release to change the destination or alternate aerodrome while the aircraft is en-route unless the flight preparation requirements for routing, aerodrome selection and minimum fuel requirements are met at the time of amendment or re-release.

(3) A pilot in command shall ensure that a flight is not allowed to continue to an aerodrome to which it has been released where the weather reports and forecasts indicate changes which would render that aerodrome unsuitable for the original flight release.

Flight Release with Airborne Weather Radar Equipment

Flight release with airborne weather radar equipment

304. A national air operator shall not release a large aircraft carrying passengers under Instrument Flight Rules or Night Visual Flight Rules conditions when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions that can be detected with airborne weather radar, may reasonably be expected along the route to be flown, unless the airborne weather radar equipment is in satisfactory operating condition.

Implementing Standards

Air operator to comply with minimum standards Schedule 12

305. The holder of an airman licence under these Regulations in meeting the requirements of Regulations 8, 12, 13, 15 through 25, 30, 32, 33, 50, 52, 61, 62, 66, 77, 94, 95, 100, 104, 106, 118, 130, 136, 189, 190 through 191, 194, 199, 200, 201, 208, 210, 211, 212, 214, 215, 216, 219, 270 and 297 through 299, shall ensure that he complies with the minimum implementing standards set out in Schedule 12.

Director General may amend Schedules

Director General may amend the Schedules

306. The Director General may by Order amend any of the Schedules.

Transitional Provisions

Transition Provisions

307. The requirements of these Regulations shall come into effect six months from the date of publication of these Regulations.

SCHEDULE 1

(Regulation 29)

The frequency and details of the progressive inspections under regulation 29 shall be as follows:

(a) provide for the complete inspection of the aircraft within each twelve month period;

(b) be consistent with the current recommendations of the manufacturer, field service experience;

(c) be appropriate to the kind of operation in which the aircraft is engaged;

(d) the progressive inspection schedule under regulation 29(8)*(b)*(ii), shall ensure that the aircraft, at all times, is airworthy and conforms to all applicable aircraft specifications, type certificate data sheets, airworthiness directives and other approved data acceptable to the authority;

(e) where the progressive inspection under this regulation is discontinued, the operator shall immediately notify the authority, in writing, of such discontinuance;

(f) where a progressive inspection is discontinued under paragraph *(e)*, the first annual inspection required by these regulations shall be due within twelve months after the last complete inspection of the aircraft under the progressive inspection programme;

(g) the one hundred hour inspection under regulation (29)(3)*(c)* shall be due within one hundred hours of that complete inspection;

(h) a complete inspection of an aircraft, for the purpose of determining when the annual and one hundred hour inspections are due, requires a detailed inspection of the aircraft and all its components in accordance with the progressive inspection programme;

(i) a routine inspection of an aircraft and a detailed inspection of several components are not considered to be a complete inspection, required under paragraph *(h)*;

SCHEDULE 2

(Regulation 95)

The weather conditions for an Extended Range Operations en-route alternate under regulation 95 shall be at or above the planning minima shown in Table 1.

Table 1

Type of Approach	**Planning Minima**	
	(RVR/visibility required and ceiling, if applicable)	
	Aerodome with	
	at least 2 separate approach procedures based on 2 separate aids serving 2 separate runways (*See* note 1)	at least 2 separate approach procedures based on 2 separate aids serving 1 runway or, at least 1 approach procedure based on 1 aid serving 1 runway
Precision Approach Cat II, III (ILS, MLS)	Precision Approach Cat I Minima	Non-Precision Approach Minima
Precision Approach Cat I (ILS, MLS)	Non-Precision Approach Minima	Circling minima or, if not available, non-precision approach minima plus 200 feet/1000 metres
Non-Precision Approach	The lower of non-precision approach minima plus 200 feet/1000 metres or circling minima	The higher of non-precision approach minima plus 200 feet/1000 metres or circling minima
Circling Approach	Circling Minima	

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

SCHEDULE 3

[Regulation 100(6)]

Mass and balance documentation under Regulation 100(6), shall be set out in the following manner:

(a) mass and balance documentation shall contain the following information:

(i) the aircraft registration and type;

(ii) the flight identification number and date;

(iii) the identity of the pilot in command;

(iv) the identity of the person who prepared the document;

(v) the dry operating mass and the corresponding centre of gravity of the aircraft;

(vii) the mass of the fuel at take-off and the mass of trip fuel;

(vii) the mass of consumables other than fuel;

(viii) the components of the load including passengers, baggage, freight and ballast;

(ix) the take-off mass, landing mass and zero fuel mass;

(x) the load distribution;

(xi) the applicable aircraft centre of gravity positions; and

(xii) the limiting mass and centre of gravity values,

(b) subject to the approval of the Authority, an operator may omit some of this data from the mass and balance documentation;

(c) where any last minute change occurs after the completion of the mass and balance documentation, this shall be brought to the attention of the pilot in command and the last minute change shall be entered on the mass and balance documentation. The maximum allowed change in the number of passengers or hold load acceptable as a last minute change shall be specified in the Operations Manual. If this number is exceeded, new mass and balance documentation shall be prepared;

(d) where mass and balance documentation is generated by a computerized mass and balance system, the operator shall verify the integrity of the output data. He shall establish a system to check that amendments of his input data are incorporated properly in the system and that the system is operating correctly on a continuous basis by verifying the output data at intervals not exceeding six months; and

(e) where an operator wishes to use an onboard mass and balance computer system as a primary source for dispatch, he shall obtain the approval of the Authority.

SCHEDULE 4

(Regulation 103)

The requirements for an Operational Flight Plan in Commercial Air Transport Operations under regulation 103 are as follows:

(a) the minimum contents of an operational flight plan shall be determined by the method of flight supervision and the type of operations conducted by the operator. An international air operator shall adhere to the 30 items operational flight plan as listed below whereas an operator conducting local flight within 25 minutes from the departure aerodrome and Visual Flight Rules flights may use an informal operational flight plan, being either an Air Traffic Control flight plan, a flight itinerary or other flight following information approved by the Authority;

(b) the format of the full operational flight plan shall allow the crew to record the fuel state and the progress of the flight relative to the plan. The operational flight plan may be computer generated or produced manually, working from charts and tables, by either the Flight Operations Officer or the flightcrew. When an operational flight plan is prepared manually, an approved form displaying the requisite information and providing the necessary space to make flight following entries as the flight progresses shall be used;

(c) the national air operator shall specify, in its company operations manual, how formal acceptance of the operational flight plan by the pilot in command and, if applicable, the Flight Operations Officer shall be recorded;

(d) the Minimum Required Content of an Operational Flight Plan which are as follows:

(i) *air operator's name;

(ii) *date;

(iii) *aeroplane registration;

(iv) *aeroplane tail number (as applicable);

(v) *aeroplane type and model (as applicable);

(vi) *flight number (as applicable);

(vii) type of flight (Instrument Flight Rules or Visual Flight Rules) (not required if all the national air operator's flights are the same);

(viii) *pilot-in-command's name;

(ix) *Flight Operations Officer's name (as applicable);

(x) *departure aerodrome;

(xi) *destination aerodrome;

(xii) *alternate aerodrome (as applicable), including enroute alternates where required;

(xiii) routing to destination by successive navigational way points and a method to obtain associated tracks for each;

(xiv) routing to alternate aerodrome (as applicable);

(xv) specification of any way points enroute to satisfy special operations requirements (Extended Range Twin-engine Operaions, etc.);

(xvi) *planned cruise altitudes to destination and alternate (as applicable);

(xvii) planned cruise true air speed;

(xviii) planned cruise indicated air speed, or mach number (as applicable);

(xix) winds at planned cruise altitude: these may be expressed in terms of direction/velocity or as a component/drift angle;

(xx) temperature at cruise altitude;

(xxi) ground speed or wind component during cruise;

(xxii) *estimated time en-route: if broken down into way point time components, a total shall be specified;

(xxiii) time from destination to alternate (as applicable);

(xxiv) distance to destination: if broken down into way point distance components, a total shall be specified;

(xxv) distance from destination to alternate (as applicable);

(xxvi) *fuel burn en-route and from destination to alternate;

(xxvii) *fuel required for the type of flight plan as applicable for—

(A) taxi;

(B) destination;

(C) alternate;

(D) holding reserve; and

(E) additional requirements or en-route reserve (as applicable);

(xxviii) *weights for—

(A) total fuel on board;

(B) zero fuel weight; and

(C) planned maximum take-off weight;

(xxix) *signature of pilot-in-command and the Flight Operations Officer (as applicable) or alternate means of certifying acceptance; and

(xxx) *number of persons on board, crew and passengers, as amended by final load figures.

Note: *The items with asterisk (*) denote the minimum items which shall be adhered to by national air operators on short range operations of less than thirty minutes, night Visual Flight Rules operations and domestic operations.*

SCHEDULE 5

(Regulation 131)

The Category II and Category III manual under regulation 131 shall meet the following minimum standards:

(a) where the Category II or III programme submitted by an operator in support of his application under regulation 131 contains an evaluation stage, the Cat II or III manual of the operator shall include the following:

(i) the location of the aircraft and the place where the demonstrations are to be conducted; and

(ii) the date the demonstrations are to commence (at least ten days after filing the application).

(b) a Category II or III manual shall contain—

(i) the registration number, make, and model of the aircraft to which it applies;

(ii) a maintenance programme; and

(iii) the procedures and instructions related to recognition of DH, use of runway visual range information, approach monitoring, the decision region (the region between the middle marker and the decision height), the maximum permissible deviations of the basic ILS indicator within the decision region, a missed approach, use of airborne low approach equipment, minimum altitude for the use of the autopilot, instrument and equipment failure warning systems, instrument failure, and other procedures, instructions, and limitations that may be found necessary by the Authority.

SCHEDULE 6

(Regulation 149)

The pilot in command of a civil aircraft, when intercepted by a military aircraft under regulation 149 shall comply with the following international standards for interpreting and responding to visual signals:

Principles to be observed by States:

(a) to achieve the uniformity in regulations which is necessary for the safety of navigation of civil aircraft due regard shall be had by Contracting States to the following principles when developing regulations and administrative directives:

(i) interception of civil aircraft will be undertaken only as a last resort;

(ii) where undertaken, an interception will be limited to determining the identity of the aircraft, unless it is necessary to return the aircraft to its planned track, direct it beyond the boundaries of national airspace, guide it away from a prohibited, restricted or danger area or instruct it to effect a landing at a designated aerodrome;

(iii) practice interception of civil aircraft will not be undertaken;

(iv) navigational guidance and related information will be given to an intercepted aircraft by radiotelephony, whenever radio contact can be established; and

(v) in the case where an intercepted civil aircraft is required to land in the territory overflown, the aerodrome designated for the landing is to be suitable for the safe landing of the aircraft type concerned;

(b) contracting States shall publish a standard method that has been established for the manoeuvring of aircraft intercepting a civil aircraft. Such method shall be designed to avoid any hazard for the intercepted aircraft;

(c) contracting States shall ensure that provision is made for the use of secondary surveillance radar, where available, to identify civil aircraft in areas where they may be subject to interception.

Action by intercepted aircraft:

(a) an aircraft which is intercepted by another aircraft shall immediately—

(i) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals;

(ii) notify, if possible, the appropriate air traffic services unit;

(iii) attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the flight; and if no contact has been established and if practicable, repeating this call on the emergency frequency 243 MHz; and

(iv) where equipped with SSR transponder, select Mode A, Code 7700, unless by the appropriate air traffic services unit;

(b) where any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual the intercepting aircraft.

(c) where any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

Radio communication during interception:

Where radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential at information by using the phrases and pronunciations in the table below and transmitting each phrase twice—

Phrases for use by INTERCEPTED aircraft			*Phrases for use by INTERCEPTED aircraft*		
Phrase	***Pronunciation[1]***	***Meaning***	***Phrase***	***Pronunciation[1]***	***Meaning***
CALL SIGN	KOL SA-IN	What is your call sign?	CALL SIGN (call sign)[2]	KOL SA-IN (call sign)	My call sign is (call sign)
FOLLOW	FOL-LO	Follow me	WILCO	VILL-KO	Understood Will comply
DESCEND	DEE-SEND	Descend for landing	CAN NOT	KANN NOTT	Unable to comply
YOU LAND	YOU LAAND	Land at this aerodrome	REPEAT	REE-PEET	Repeat your instruction
PROCEED	PRO-SEED	You may proceed	AM LOST	AM LOSST	Position unknown
			MAYDAY	MAYDAY	I am in distress
			HIJACK[3]	HI-JACK	I have been hijacked
			LAND (place name)	LAAND (place name)	I request to land at (place name)
			DESCEND	DEE-SEND	I require descent

1. In the second column, syllables to be emphasized aare underlined.

2. The call sign required to be given is that used in radiotelephone, communications with air traffic services units and corresponding to the aircraft identification in the flight plan.

3. Circumstancesw may not always permit, nor make desirable, the use of the phrase "HIJACK".

SCHEDULE 7

(Regulation 160)

The universal signs to be used in air transport operations shall have the following meanings:

(a) distress signals. The following signals, used either together or separately, mean that grave and imminent danger threatens, and immediate assistance is requested:

(i) a signal made by radiotelegraphy or by any other signaling method consisting of the group SOS (• • • — — — • • • in the Morse Code);

(ii) a signal sent by radiotelephony consisting of the spoken word MAYDAY;

(iii) rockets or shells throwing red lights, fired one at a time at short intervals; and

(iv) a parachute flare showing a red light;

(b) none of the provisions in this clause shall prevent the use, by an aircraft in distress, of any means at its disposal to attract attention, make known its position and obtain help;

(c) the following signals, used either together or separately, means that an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance:

(i) the repeated switching on and off of the landing lights; or

(ii) the repeated switching on and off of the navigation lights in such manner as to be distinct from flashing navigation lights;

(d) the following signals, used either together or separately, means that an aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or of some person on board or within sight:

(i) a signal made by radiotelegraphy or by any other signaling method consisting of the group XXX; and

(ii) a signal sent by radiotelephony consisting of the spoken words PAN, PAN;

(e) the following signals shall be used in the event of interception:

(i) signals initiated by intercepting aircraft and responses by intercepted aircraft;

Series	*INTERCEPTING Aircraft Signals*	*Meaning*	*INTERCEPTED Aircraft Responds*	*Meaning*
1	DAY or NIGHT—Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a helicopter) from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is a helicopter) and, after acknowledgement, a slow level turn, normally to the left, (or to the right in the case of a helicopter) on the desired heading. *Note 1.—Meteorological conditions or terrain may require the intercepting aircraft to reverse the positions and direction of turn given above in Series 1.* *Note 2.—If the intercepted aircraft is not able to keep pace with the intercepted aircraft, the latter is expected to fly a series of racetrack patterns and to rock the aircraft each time it passes the intercepted aircraft.*	Follow me	following.	
2.	DAY or NIGHT—An abrupt break-away manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted arcraft.	You may proceed.	Day or Night—Rocking the aircraft.	Understood, will comply
3.	DAY or NIGHT—Lowering landing gear (if fitted), showing steady landing lights and overlying runway in use or, if the intercepted aircraft is a helicopter, over flying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome	Day or Night—Lowering landing gear (if fitted), showing steady landing lights and following the intercepting aircraft and, if, after overlying the runway in use or helicopter landing area, landing is considered safe, proceeding to land.	Understood, will comply

(ii) signals initiated by intercepted aircraft and responses by intercepting aircraft.

Series	*INTERCEPTED Aircraft Signals*	*Meaning*	*INTERCEPTING Aircraft Responds*	*Meaning*
4.	DAY or NIGHT—Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 300 metres (1,000 feet) but not exceeding 600 metres (2,000 feet) (in the case of a helicopter, at a height exceeding 50 metres (170 feet) but not exceeding 100 metres (330 feet) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	DAY or NIGHT—If it is desired that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses Series 1 signals prescribed for intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.	Understood follow me Understood you may proceed.
5.	DAY or NIGHT—Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply	Day or Night—Use Series 2 signals prescribed for intercepting aircraft.	
6.	DAY or NIGHT—Irregular flashing of all available lights.	In distress.	Day or Night—Use Series 2 signals prescribed for intercepting aircraft.	Understood.

(f) visual signals used to warn an unauthorised aircraft. By day and by night, a series of projectiles discharged from the ground at intervals of 10 seconds, each showing, on bursting, red and green lights or stars will indicate to an unauthorised aircraft that it is flying in or about to enter a restricted, prohibited, or danger area, and that the aircraft is to take such remedial action as may be necessary.

(g) signals for aerodrome traffic. Aerodrome controllers shall use and pilots shall obey the following light and pyrotechnic signals:

Light		**From Aerodrome Control to:**	
		Aircraft in flight	**Aircraft on the ground**
Directed towards aircraft concerned *(See* Figure 1.1)	Steady green Steady red Series of green flashes Series of red flashes Series of white flashes Red pyrotechnic	✹ Cleared to land ✹ Give way to other aircraft and continue circling ✹ Return for landing* ✹ Aerodrome unsafe, do not land ✹ Land at this aerodrome and proceed to apron* ✹ Notwithstanding any previous instructions, do not land for the time being	Cleared for take-off Stop Cleared to taxi Taxi clear of landing area in use Return to starting point on the aerodrome

* *Clearances to land and to taxi will be given in due course.*

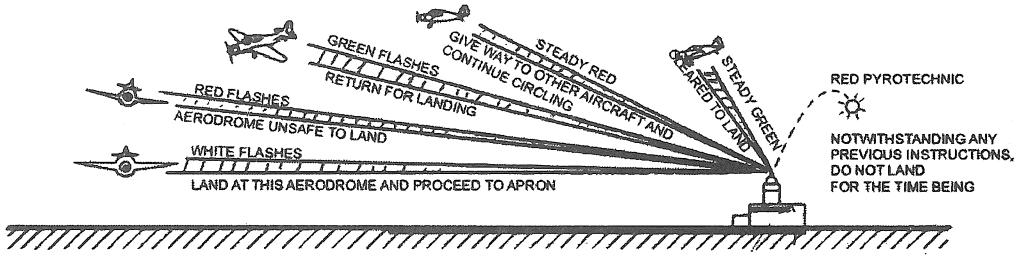


Figure 8.1

(h) Pilots shall acknowledge the aerodrome controller signals as follows:

(i) when in flight—

(A) during the hours of daylight by rocking the aircraft's wings; and

Note: *This signal should not be expected on the base and final legs of the approach*

(B) during the hours of darkness by flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights;

(ii) when on the ground—

(A) during the hours of daylight by moving the aircraft's ailerons or rudder; and

(B) during the hours of darkness by flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights.

(i) aerodrome authorities shall use the following visual ground signals shall be use during the following situations:

(i) prohibition of landing.

A horizontal red square panel with yellow diagonals (Figure 8.2) when displayed in a signal area indicates that landings are prohibited and that the prohibition is liable to be prolonged; and

Figure 8.2

(ii) need for special precautions while approaching or landing.

A horizontal red square panel with one yellow diagonal (Figure 8.3) when displayed in a signal area indicates that owing to the bad state of the manoeuvring area, or for any other reason, special precautions shall be observed in approaching to land or in landing.

Figure 8.3

(iii) use of runways and taxiways.

A horizontal white dumb-bell (Figure 8.4) when displayed in a signal area indicates that aircraft are required to land, take off and taxi on runways and taxiways only.

Figure 8.4

(iv) the same horizontal white dumb-bell as in Figure 8.4, but with a black bar placed perpendicular to the shaft across each circular portion of the dumb-bell (Figure 8.5) when displayed in a signal area indicates that aircraft are required to land and take off on runways only, but other manoeuvres need not be confined to runways and taxiways

Figure 8.5

(v) closed runways or taxiways. Crosses of a single contrasting colour, yellow or white (Figure 8.6), displayed horizontally on runways and taxiways or parts thereof indicate an area unfit for movement of aircraft.

Figure 8.6

(vi) directions for landing or take-off.

A horizontal white or orange landing T (Figure 8.7) indicates the direction to be used by aircraft for landing and take-off, which shall be in a direction parallel to the shaft of the T towards the cross arm.

Note: When used at night, the landing T is either illuminated or outlined in white coloured lights.

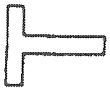


Figure 8.7

(vii) a set of two digits (Figure 8.8) displayed vertically at or near the aerodrome control tower indicates to aircraft on the manoeuvring area the direction for take-off, expressed in units of 10 degrees to the nearest 10 degrees of the magnetic compass.

Figure 8.8

(viii) right-hand traffic. When displayed in a signal area, or horizontally at the end of the runway or strip in use, a right-hand arrow of conspicuous colour (Figure 8.9) indicates that turns are to be made to the right before landing and after take-off.

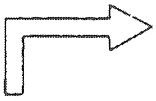


Figure 8.9

(ix) air traffic services reporting office. The letter C displayed vertically in black against a yellow background (Figure 8.10) indicates the location of the air traffic services reporting office.

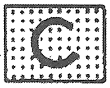


Figure 8.10

(x) glider flights in operation. A double white cross displayed horizontally (Figure 8.11) in the signal area indicates that the aerodrome is being used by gliders and that glider flights are being performed.

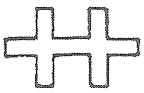


Figure 8.11

(j) the following marshalling signals shall be used from a signalman to an aircraft.

These signals are designed for use by the signalman, with hands illuminated as necessary to facilitate observation by the pilot, and facing the aircraft in a position:

(i) for fixed-wing aircraft, the signalman shall be positioned forward of the left-wing tip within view of the pilot and, for helicopters, where the signalman can best be seen by the pilot.

The meaning of the relevant signals remains the same if bats, illuminated wands or torch lights are held.

Note: *The aircraft engines are numbered, for the signalman facing the aircraft, from right to left (i.e., No. I engine being the port outer engine).*

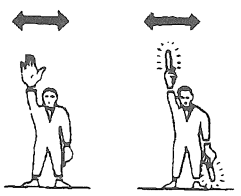
Note: *Signals marked with an asterisk are designed for use to hovering helicopters.*

(ii) prior to using the following signals, the signalman shall ascertain that the area within which an aircraft is to be guided is clear of objects which the aircraft might otherwise strike.

Note: *The design of many aircraft is such that the path of the wing tips, engines and other extremities cannot always be monitored visually from the flight deck while the aircraft is being manoeuvred on the ground*

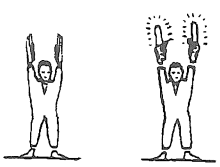
1. To proceed under further guidance by signalman

Signalman directs pilot if traffic conditions on aerodrome require this action.



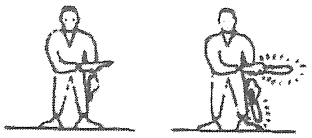
2. This bay

Arms above head in vertical position with palms facing inward.



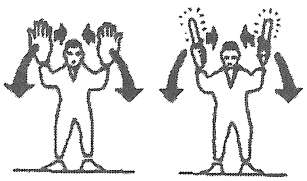
3. Proceed to next signalman

Right or left arm down, other arm moved across the body and extended to indicate direction of next signalman.



4. Move ahead

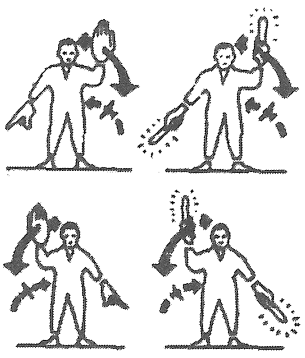
Arms a little aside, palms facing backward and repeatedly moved upward-backward from shoulder height.



5. Turn

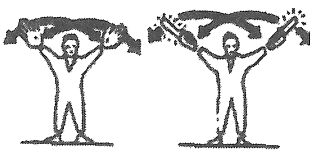
a) Turn to your left: right arm downward, left arm repeatedly moved upward-backward. Speed of arm movement indicating rate of turn.

b)Turn to your right: left arm downward, right arm repeatedly moved upward-backward. Speed of arm movement indicating rate of turn.



6. Stop

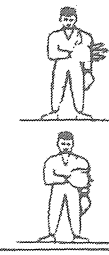
Arms repeatedly crossed above head (the rapidity of the arm movement should be related to the urgency of the stop, i.e. the faster the movement the quicker the stop).



7. Brakes

a)Engage brakes. raise arm and hand, with fingers extended, horizontally in front of body, then clench fist.

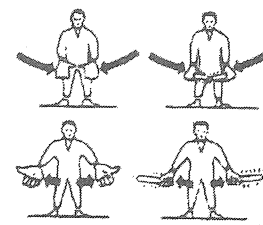
b)Release brakes. raise arm, with fist clenched, horizontally in front of body, then extend fingers.



8. Chocks

a)Chocks inserted: arms down, palms facing inwards, move arms from extended position inwards.

b)Chocks removed: arms down, palms facing outwards, move arms outwards.

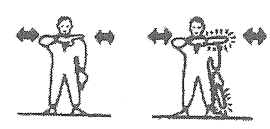


9. Start engine(s)

Left hand overhead with appropriate number of fingers extended, to indicate the number of the engine to be started, and circular motion of right hand at head level.

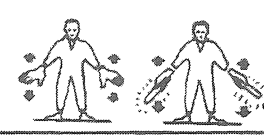
10. Cut engines

Either arm and hand level with shoulder, hand across throat, palm downward. The hand is moved sideways with the arm remaining bent.



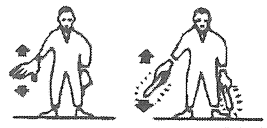
11. Slow down

Arms down with palms toward ground, then moved up and down several times.



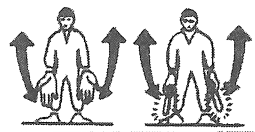
12. Slow down engine(s) on indicated side

Arms down with palms toward ground, then either *right or left* hand waved up and down indicating the *left or right* side engine(s) respectively should be slowed down.



13. Move back

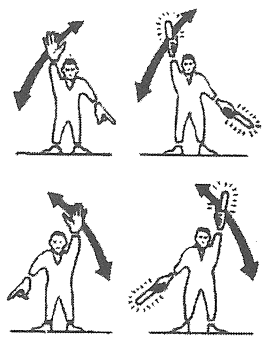
Arms by sides, palms facing forward, swept forward and upward repeatedly to shoulder height.



14. Turns while backing

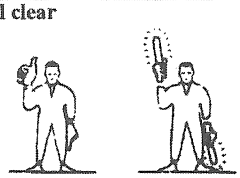
a)For tail to starboard: point left arm down, and right arm brought from overhead, vertical position to horizontal forward position, repeating right arm movement.

b)For tail to *port:* point right arm down, and left arm brought from overhead, vertical position to horizontal forward position, repeating left arm movement.



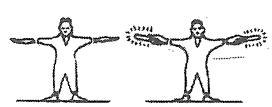
15. All clear

Right arm raised at elbow with thumb erect.



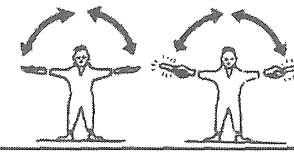
16. Hover

Arms extended horizontally sideways.



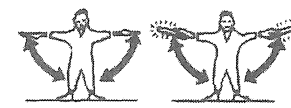
***17. Move upwards**

Arms extended horizontally to the side beckoning upwards, with palms turned up. Speed of movement indicates rate of ascent.



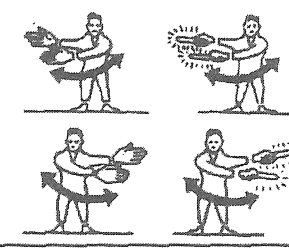
***18. Move downwards**

Arms extended horizontally to the side beckoning downwards, with palms turned down. Speed of movement indicates rate of descent.



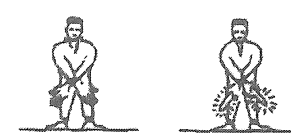
*** 19. Move horizontally**

Appropriate arm extended horizontally sideways in direction of movement and other arm moved in front of body in same direction, in a repeating movement.



***20. Land**

Arms crossed and extended downwards in front of the body



(k) signals from the pilot of an aircraft to a signalman.

The pilot in command or co-pilot shall use the following signals when communicating with a signalman:

(i) brakes engaged: raise arm and hand, with fingers extended, horizontally in front of face, then clench fist;

(ii) brakes released. raise arm, with fist clenched, horizontally in front of face, then extend fingers;

Note: These signals are designed for use by a pilot in the cockpit with hands plainly visible to the signalman, and illuminated as necessary to facilitate observation by the signalman.

Note: The aircraft engines are numbered in relation to the signalman facing the aircraft, from right to left (i.e., No. I engine being the port outer engine).

Note: The moment the fist is clenched or the fingers are extended indicates, respectively, the moment of brake engagement or release.

(iii) insert chocks arms extended, palms outwards, move hands inwards to cross in front of face;

(iv) remove chocks hands crossed in front of face, palms outwards, move arms outwards; and

(v) ready to start engine(s). Raise the appropriate number of fingers on one hand indicating the number of the engine to be started;

(l) interception of Civil Aircraft:

(i) principles to be observed by States:

(A) to achieve the uniformity in regulations which is necessary for the safety of navigation of civil aircraft, due regard shall be had by Contracting States to the following principles when developing regulations and administrative directives:

(I) interception of civil aircraft will be undertaken only as a last resort;

(II) if undertaken, an interception will be limited to determining the identity of the aircraft, unless it is necessary to return the aircraft to its planned track, direct it beyond the boundaries of national airspace, guide it away from a prohibited, restricted or danger area or instruct it to effect a landing at a designated aerodrome;

(III) Practice interception of civil aircraft will not be undertaken;

(IV) Navigational guidance and related information will be given to an intercepted aircraft by radiotelephony, whenever radio contact can be established; and

(V) In the cast where an intercepted civil aircraft is required to land in the territory overflown, the aerodrome designated for the landing is to be suitable for the safe landing of the aircraft type concerned.

Note: In the unanimous adoption by the 25th Session (Extraordinary) of the ICA0 Assembly on 10 May 1984 of Article 3 is to the Convention on International Civil Aviation, the Contracting States have recognized that "every State shall refrain from resorting to the use of weapons against civil aircraft in flight".

(B) Contracting States shall publish a standard method that has been established for the manoeuvring of aircraft intercepting a civil aircraft. Such method shall be designed to avoid any hazard for the intercepted aircraft.

(C) Contracting States shall ensure that provision is made for the use of secondary surveillance radar, where available, to identify civil aircraft in areas where they may be subject to interception.

(ii) action by intercepted aircraft—

(A) an aircraft which is intercepted by another aircraft shall immediately—

(I) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals specified in Implementing standard 1;

(II) notify, if possible, the appropriate air traffic services unit;

(III) attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the flight; and if no contact has been established and if practicable, repeating this call on the emergency frequency 243 MHz;

(IV) if equipped with Secondary Surveillance Radar transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services unit;

(B) if any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft;

(C) if any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft;

(m) radio communication during interception—

If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential at information by using the phrases and pronunciations in the table below and transmitting each phrase twice:

Phrases for use by INTERCEPTING aircraft			*Phrases for use by INTERCEPTED aircraft*		
Phrase	***Pronunciation[1]***	***Meaning***	***Phrase***	***Pronunciation[1]***	***Meaning***
CALL SIGN	KOL SA–IN	What is your call sign?	CALL SIGN (call sign)[2]	KOL SA–IN (call sign)	My call sigh is (call sign)
FOLLOW	FOL–LO	Follow me	WILCO	VILL–KO	Understood Will comply
DESCEND	DEE–SEND	Descend for landing	CAN NOT	KANN NOTT	Unable to comply
YOU LAND	YOU LAAND	Land at this aerodrome	REPEAT	REE–PEET	Repeat your instruction
PROCEED	PRO–SEED	You may proceed	AM LOST	AM LOSST	Position unknown
			MAYDAY	MAYDAY	I am in distress
			HIJACK[3]	HI-JACK	I have been hijacked
			LAND (place name)	LAAND (place name)	I request to land at (place name)
			DESCEND	DEE–SEND	I require descent

1. In the second column, syllables to be emphasized are underlined.

2 The call sign required to be given is that used in radiotelephone, communications with air traffic services units and corrisponding to the aircraft identification in the flight plan.

3. Circumstances may not always permit, nor make desirable, the use of the Phrase "HIKACK"

(n) Cruising Levels—

The pilot–in-command shall observe the following cruising levels except when, on the basis of regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum of less than 600 metres (2,000 feet) but not less than 300 metres (1,000 feet) is prescribed for use, under specified conditions, by aircraft operating above FL 290 within designated portions of the airspace:

TRACK**											
From 000 Degrees to 179 Degrees***						From 180 Degrees to 359 Degrees***					
Instruments Flight Rules Flights			Visual Flight Rules Flights			Instrument Flight Rules Flights			Visual Flight Rules Flights		
	Altitude			Altitude			Altitude			Altitude	
FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet
-90	—	—	—	—	—	0	—	—	—	—	—
10	300	1000	—	—	—	20	600	2000	—	—	—
30	900	3000	35	1050	3500	40	1200	4000	45	1350	4500
50	1500	5000	55	1700	5500	60	1850	6000	65	2000	6500
70	2150	7000	75	2300	7500	50	2450	8000	85	2600	8500
90	2750	9000	95	2900	9500	100	3050	10000	105	3200	10500
110	3350	11000	115	3500	11500	120	3650	12000	125	3800	12500
130	3950	13000	135	4100	13500	140	4250	14000	145	4400	14500
150	4550	15000	155	4700	15500	160	4900	16000	165	5050	16500
170	5200	17000	175	5300	17500	180	5500	18000	185	5650	18500
190	5800	19000	195	950	19500	200	6100	20000	205	6250	20500
210	6400	21000	215	6550	21500	220	6700	22000	225	6850	22500
230	7000	23000	235	7150	23500	240	7300	24000	245	7450	24500
250	7600	25000	255	7750	25500	260	7900	26000	265	8100	26500
270	8250	27000	275	8100	27500	280	8550	28000	285	8700	28500
290	8850	29000	300	9150	30000	310	9450	31000	320	9750	32000
330	10050	33000	340	10350	34000	350	10650	35000	360	10950	36000
370	11300	37000	380	11600	38000	390	11900	39000	400	12200	40000
410	12500	41000	420	12500	42000	430	13100	43000	440	13400	44000
450	13700	45000	460	14000	46000	470	14350	47000	480	14650	48000
490	14950	49000	500	15250	50000	510	15550	51000	520	15850	52000
etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.

**Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

***Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

SCHEDULE 8

(Regulation 162)

An operator shall not operate under Visual Meterological Conditions where the following conditions exists:

Airspace and Visual Meteorological Conditions Minima Table*			
Airspace class	A***B C D E	F G	
		Above 900 metres (3000 feet) AMSL or above 300 metres (1000 feet) above terrain whichever is the higher	At and below 900 metres (3 000 feet) AMSL or 300 metres (1 000 feet) above terrain whichever is the higher
Distance from clouds	1500 metres horizontally 300 metres (1,000 feet) vertically		Clear of cloud and insight of the surface
Flight visibility	8 kilometres at and above 3 050 metres (10,000 feet) AMSL 5 kilometres below 3 050 metres (10,000 ft) AMSL		5 kilometres**

*When the height of the transition altitude is lower than 3050 metres (10, 000 feet) AMSL, FL 100 should be used in lieu of 10,000 feet.

**When so prescribed by the appropriate Air Traffic Services Authority:

(a) lower flight visibilities to 1 500 metres may be permitted for flights operating:

(1) at speeds that, in the prevailing visibility, will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or

(2) in circumstances in which the probability of encounters with other traffic would normally be low, for example: in areas of low volume traffic and for aerial work at low levels.

(b) HELICOPTERS may be permitted to operate *in less than 1 500 metres* flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

***The Visual Meteorological Conditions minima in Class A airspace are included for guidance to pilots and do not imply acceptance of Visual Flight Rules flights in Class A airspace.

SCHEDULE 9

PART A

(Regulation 229)

Company procedures indoctrination training for national air operators shall include as applicable, the following:

(a) Trinidad and Tobago Civil Aviation Regulations and Implementing Standards;

(b) air operator certificate and operating conditions;

(c) company organization, reporting relationships and communication procedures;

(d) flight planning and operating procedures;

(e) fuelling procedures including procedures for fuelling with passengers on board and fuel contamination precautions;

(f) critical surface contamination and safety awareness programme;

(g) passenger safety briefings and safe movement of passengers to/from the aeroplane;

(h) use and status of company operations manual including maintenance release procedures and accident/incident reporting procedures;

(i) use of minimum equipment lists (where applicable);

(j) windshear, aeroplane icing, and other meteorological training appropriate to the area of operations;

(k) navigation procedures and other specialized operations applicable to the operator;

(l) accident/incident reporting;

(m) passenger on board medical emergency;

(n) handling of disabled passengers;

(o) air operator's flight safety programme;

(p) operational control system;

(q) weight and balance system procedures;

(r) standard operating procedures (where applicable); and

(s) pre-flightcrew-member briefing.

PART B

(Regulation 232)

1. A Crew Resource Management Training Programme under regulation 232 shall include—

(a) an initial indoctrination or awareness segment;

(b) a method to provide recurrent practice and feedback; and

(c) a method of providing continuing reinforcement.

2. Curriculum topics to be contained in an initial Crew Resource Management training course include—

(a) communications processes and decision behaviour;

(b) internal and external influences on interpersonal communications;

(c) barriers to communication;

(d) listening skills;

(e) decision making skills;

(f) effective briefings;

(g) developing open communications;

(h) inquiry, advocacy, and assertion training;

(i) crew self-critique;

(j) conflict resolution;

(k) team building and maintenance;

(l) leadership and follow-ship training;

(m) interpersonal relationships;

(n) workload management;

(o) situational awareness;

(p) how to prepare, plan and monitor task completions;

(q) workload distribution;

(r) distraction avoidance;

(s) individual factors; and

(t) stress reduction.

PART C

(Regulation 233)

INITIAL EMERGENCT EQUIPMENT DRILLS

1. Each aircraft crew member shall accomplish emergency training during the specified training periods, using those items of installed emergency equipment for each type of aeroplane in which he or she is to serve.

2. During initial training, each aircraft crew member shall perform the following one-time emergency drills:

(a) protective Breathing Equipment and Fire-fighting Drill:

(i) locate source of fire or smoke (actual or simulated fire);

(ii) implement procedures for effective crew co-ordination and communication, including notification of flightcrew members about fire situation;

(iii) on and activate installed PBE or approved PBE simulation device;

(iv) manoeuvre in limited space with reduced visibility;

(v) effectively use the aircraft's communication system;

(vi) identify class of fire;

(vii) select the appropriate extinguisher;

(viii) properly remove extinguisher from securing device;

(ix) prepare, operate and discharge extinguisher properly; and

(x) utilize correct firefighting techniques for type of fire.

(b) emergency Evacuation Drill:

(i) recognize and evaluate an emergency;

(ii) assume appropriate protective position;

(iii) command passengers to assume protective position;

(iv) implement crew co-ordination procedures;

(v) ensure activation of emergency lights;

(vi) assess aircraft conditions;

(vii) initiate evacuation (dependent on signal or decision);

(viii) command passengers to release seatbelts and evacuate;

(ix) assess exit and redirect, if necessary; to open exit, including deploying slides and commanding helpers to assist;

(x) command passengers to evacuate at exit and run away from aircraft;

(xi) assist special need passengers, such as handicapped, elderly, and persons in a state of panic;

(xii) actually exit aircraft or training device using at least one of the installed emergency evacuation slides;

Note: *The crew-member may either observe the aircraft exits being opened in the emergency mode and the associated exit slid or/raft pack being deployed and inflated, or perform the tasks resulting in the accomplishment of these actions.*

3. Each aircraft crew member shall accomplish additional emergency drill during initial training, including performing the following emergency drills:

(a) emergency exit drill:

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

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

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

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

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

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

(vii) open each type of window exit; and

(viii) remove escape rope and position for use;

(b) hand fire extinguisher drill:

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

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

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

(iv) prepare extinguisher for use;

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

Note: *Fighting an actual or a simulated fire is not necessary during this drill.*

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

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

(c) emergency oxygen system drill:

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

(ii) verbally demonstrate operation of chemical oxygen generators;

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

(iv) administer oxygen to self, passengers, and to those persons with special oxygen needs;

(v) utilize proper procedures for effective crew co-ordination and communication;

(vi) activate PBE;

(vii) manually open each type of oxygen mask compartment and deploy oxygen masks;

(viii) identify compartments with extra oxygen masks;

(ix) implement immediate action decompression procedures; and

(x) reset oxygen system, if applicable;

(d) flotation device drill:

(i) don and inflate life vests;

(ii) remove and use flotation seat cushions; and

(iii) demonstrate swimming techniques using a seat cushion;

(e) ditching drill, (if applicable):

Note: *During a ditching drill students shall perform the "prior to impact" and "after impact" procedures for a ditching, as appropriate to the specific operator's type of operation.*

(i) implement crew co-ordination procedures, including briefing with captain to obtain pertinent ditching information and briefing cabin crews;

(ii) co-ordinate time frame for cabin and passenger preparation;

(iii) adequately brief passengers on ditching procedures;

(iv) ensure cabin is prepared, including the securing of carry-on baggage, lavatories, and galleys;

(v) demonstrate how to properly deploy and inflate slide-rafts;

(vi) remove, position, attach slide-rafts to aircraft;

(vii) inflate rafts;

(viii) use escape ropes at over-wing exits;

(ix) command helpers to assist;

(x) use slides and seat cushions as flotation devices;

(xi) remove appropriate emergency equipment from aircraft;

(xii) board rafts properly;

(xiii) initiate raft management procedures (i.e., Disconnecting rafts from aircraft, applying immediate first aid, rescuing persons in water, salvaging floating rations and equipment, deploying sea anchor, tying rafts together, activating or ensuring operation of emergency locator transmitter);

(xiv) initiate basic survival procedures (i.e., Removing and utilizing survival kit items, repairing and maintaining raft, ensuring protection from exposure, erecting canopy, communicating location, providing continued first aid, providing sustenance);

(xv) use heaving line to rescue persons in water;

(xvi) tie slide-rafts or rafts together;

(xvii) use life-line on edge of slide-raft or raft as a handhold; and

(xviii) secure survival kit items.

4. Each aircraft crew member shall accomplish additional emergency drill requirements during initial and recurrent training including observing the following emergency drills:

(a) life-raft removal and inflation drill, if applicable:

(i) removal of a life raft from the aircraft or training device; and

(ii) inflation of a life raft.

(b) slide-raft transfer drill:

(i) transfer of each type of slide-raft pack from an unusable door to a usable door;

(ii) disconnect slide-raft at unusable door;

(iii) redirect passengers to usable slide-raft; and

(iv) installation and deployment of slide-raft at usable door.

(c) slide and slide-raft deployment, inflation, and detachment drill:

(i) engage slide girt bar in floor brackets;

(ii) inflate slides with and without quick-release handle (manually and automatically);

(iii) disconnecting slide from aircraft for use as a flotation device;

(iv) arm slide-rafts for automatic inflation; and

(v) disconnecting slide-raft from the aircraft.

(d) emergency evacuation slide drill:

(i) open armed exit with slide or slide-raft deployment and inflation; and

(ii) egress from aircraft via the evacuation slide and run away to a safe distance.

PART D

(Regulation 234)

INITIAL AIRCRAFT GROUND TRAINING

1. Flightcrew—

(a) a national air operator shall have an initial aircraft ground training curriculum for the flightcrew applicable to the type of operations conducted and aircraft flown. Instructions shall include at least the following general subjects:

(i) air operator's dispatch, flight release, or flight locating procedures;

(ii) principles and methods for determining weight and balance, and runway limitations for take-off; and

(iii) adverse weather recognition and avoidance, and flight procedures which shall be followed when operating in the following conditions:

(A) icing;

(B) fog;

(C) turbulence;

(D) heavy precipitation;

(E) thunderstorms;

(F) low-level windshear and microburst; and

(G) low visibility;

(iv) normal and emergency communications procedures and navigation equipment including the national air operator communications procedures and Air Traffic Control clearance requirements;

(v) navigation procedures used in area departure, en-route, area arrival, approach and landing phases;

(vi) approved crew resource management training;

(vii) air traffic control systems, procedures, and phraseology; and

(viii) aircraft performance characteristics during all flight regimes, including—

(A) the use of charts, tables, tabulated data and other related manual information;

(B) normal, abnormal, and emergency performance problems;

(C) meteorological and weight limiting performance factors (such as temperature, pressure, contaminated runways, precipitation, climb/runway limits);

(D) inoperative equipment performance limiting factors (such as SMEL/CDL, inoperative antiskid); and

(E) special operational conditions (such as unpaved runways, high altitude aerodromes and drift down requirements);

(b) a national air operator shall have an initial aircraft ground training curriculum for the flightcrew applicable to the type of operations conducted and aircraft flown, including at least the following aircraft systems:

(i) aircraft:

(A) aircraft dimensions, turning radius, panel layouts, cockpit and cabin configurations; and

(B) other major systems and components or appliances of the aircraft.

(ii) powerplants:

(A) basic engine description;

(B) engine thrust ratings; and

(C) engine components such as accessory drive, ignition, oil, fuel control, hydraulic, and bleed air features;

(iii) electrical:
- (A) sources of aircraft electrical power (engine driven generators, APU generator, and external power);
- (B) electrical buses;
- (C) circuit breakers;
- (D) aircraft battery; and
- (E) standby power systems;

(iv) hydraulic:
- (A) hydraulic reservoirs, pumps, accumulators; filters, check valves, interconnects and actuators; and
- (B) other hydraulically operated components;

(v) fuel:
- (A) fuel tanks (location and quantities);
- (B) engine driven pumps;
- (C) boost pumps;
- (D) system valves and crossfeeds;
- (E) quantity indicators; and
- (F) provisions for fuel jettisoning;

(vi) pneumatic:
- (A) bleed air sources (APU or external ground air); means of routing, venting and controlling bleed air via valves; and
- (B) ducts, chambers, and temperature and pressure limiting devices;

(vii) air-conditioning and pressurization:
- (A) heaters, air-conditioning packs, fans, and other environmental control devices;
- (B) pressurization system components such as outflow and negative pressure relief valves; and
- (C) automatic, standby, and manual pressurization controls and annunciators;

(viii) flight controls:
- (A) primary controls (yaw, pitch, and roll devices);
- (B) secondary controls (leading and trailing edge devices, flaps, trim, and damping mechanisms);
- (C) means of actuation (direct, indirect or fly by wire); and
- (D) redundancy devices;

(ix) landing gear:
- (A) landing gear extension and retraction mechanism including the operating sequence of struts, doors, and locking devices, and brake and antiskid systems, if applicable;
- (B) steering (nose or body steering gear);
- (C) bogie arrangements;
- (D) air and ground sensor relays; and
- (E) visual downlock indicators;

(x) ice and rain protection:
- (A) rain removal systems; and
- (B) anti-icing and de-icing system(s) affecting flight controls, engines, pitot static probes, fluid outlets, cockpit windows, and aircraft structures;

(xi) equipment and furnishings:
- (A) exits;
- (B) galleys;
- (C) water and waste systems;
- (D) lavatories;

(E) cargo areas;
(F) crew member and passenger seats;
(G) bulkheads;
(F) seating and/or cargo configurations; and
(G) non-emergency equipment and furnishings;

(xii) navigation equipment:
(A) flight directors;
(B) horizontal situation indicator;
(C) radio magnetic indicator;
(D) navigation receivers (GPS, ADF, VOR, LORAN-C, RNAV, Marker Beacon, DME);
(E) inertial systems (INS, IRS);
(F) functional displays;
(G) fault indications and comparator systems;
(H) aircraft transponders;
(I) radio altimeters;
(J) weather radar; and
(K) cathode ray tube or computer generated displays of aircraft position and navigation information;

(xiii) auto flight system:
(A) autopilot;
(B) auto throttles;
(C) flight director and navigation systems;
(D) automatic approach tracking;
(E) auto land; and
(F) automatic fuel and performance management systems;

(xiv) flight instruments:
(A) panel arrangement;
(B) flight instruments (attitude indicator, directional gyro, magnetic compass, airspeed indicator, vertical speed indicator, altimeters, standby instruments); and
(C) instrument power sources, and instrument sensory sources (e.g., Pitot static pressure);

(xv) display systems:
(A) weather radar; and
(B) other Cathode Ray Tube displays (e.g., checklist, vertical navigation or longitudinal navigation displays);

(xvi) communication equipment:
(A) VHF and HF radios;
(B) audio panels;
(C) in-flight interphone and passenger address systems;
(D) voice recorder; and
(E) air ground passive communications systems (ACARS);

(xvii) warning systems:
(A) aural, visual, and tactile warning systems (including the character and degree of urgency related to each signal); and
(B) warning and caution annunciators systems (including ground proximity and take-off warning systems);

(xviii) fire protection:
(A) fire and overheat sensors, loops, modules, or other means of providing visual and/or aural indications of fire or overheat detection;
(B) procedures for the use of fire handles, automatic extinguishing systems and extinguishing agents; and

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

(xix) oxygen:

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

(B) sources of oxygen (gaseous or solid);

(C) flow and distribution networks;

(D) automatic deployment systems;

(E) regulators, pressure levels and gauges; and

(F) servicing requirements;

(xx) lighting:

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

(B) power sources;

(C) switch positions; and

(D) spare light bulb locations;

(xxi) emergency equipment:

(A) fire and oxygen bottles;

(B) first aid kits;

(C) life rafts and lifevests;

(D) crash axes;

(E) emergency exits and lights;

(F) slides and slide rafts;

(G) escape straps or handles; and

(H) hatches, ladders and movable stairs;

(xxii) auxiliary Power Unit (APU):

(A) electric and bleed air capabilities;

(B) interfaces with electrical and pneumatic systems;

(C) inlet doors and exhaust ducts; and

(D) fuel supply;

(c) a national air operator shall have an initial aircraft ground training curriculum for the flightcrew applicable to the type of operations conducted and aircraft flown, including at least the following aircraft systems integration items:

(i) use of checklist:

(A) safety chocks;

(B) cockpit preparation (switch position and checklist flows);

(C) checklist callouts and responses; and

(D) checklist sequence;

(ii) flight planning:

(A) performance limitations (meteorological, weight, and MEL and CDL tems);

(B) required fuel loads;

(C) weather planning (lower than standard take-off minimums or alternate requirements);

(iii) navigation systems:

(A) pre-flight and operation of applicable receivers;

(B) onboard navigation systems; and

(C) flight plans information input and retrieval;

(iv) auto flight Autopilot, auto thrust, and flight director systems, including the appropriate procedures, normal and abnormal indications, and annunciators;

(v) cockpit familiarization:

(A) activation of aircraft system controls and switches to include normal, abnormal and emergency switches; and

(B) control positions and relevant annunciators, lights, or other caution and warning systems.

2. Cabin Crew—

(a) a national air operator shall have an initial ground-training curriculum for cabin crew applicable to the type of operations conducted and aircraft flown, including at least the following general subjects:

(i) aircraft familiarization:

(A) aircraft characteristics and description;

(B) flight deck configuration;

(C) cabin configuration;

(D) galleys;

(E) lavatories; and

(F) stowage areas;

(ii) aircraft equipment and furnishings:

(A) cabin crew stations;

(B) cabin crew panels;

(C) passenger seats;

(D) passenger service units and convenience panels;

(E) passenger information signs;

(F) aircraft markings; and

(G) aircraft placards;

(iii) aircraft systems:

(A) air-conditioning and pressurization system;

(B) aircraft communication systems (call, interphone and passenger address);

(C) lighting and electrical systems;

(D) oxygen systems (flightcrew, observer and passenger); and

(E) water system;

(iv) aircraft exits:

(A) general information;

(B) exits with slide or slide rafts (pre-flight and normal operation);

(C) exits without slides (pre-flight and normal operations); and

(D) window exits.

(v) crew-member communication and co-ordination:

(A) authority of pilot in command;

(B) routine communication signals and procedures; and

(C) crew-member briefing;

(vi) routine crew-member duties and procedures:

(A) crew-member general responsibilities;

(B) reporting duties and procedures for specific aircraft;

(C) pre-departure duties and procedures prior to passenger boarding;

(D) passenger boarding duties and procedures;

(E) prior to movement on the surface duties and procedures;

(F) prior to take-off duties and procedures applicable to specific aircraft;

(G) in-flight duties and procedures;

(H) prior to landing duties and procedures;
(I) movement on the surface and arrival duties and procedures;
(J) after arrival duties and procedures; and
(K) intermediate stops;

(vii) passenger handling responsibilities:
(A) crew-member general responsibilities;
(B) infants, children, and unaccompanied minors;
(C) passengers needing special assistance;
(D) passengers needing special accommodation;
(E) carry-on stowage requirements;
(F) passenger seating requirements; and
(G) smoking and no smoking requirements;

(b) a national air operator shall have an initial ground training curriculum for cabin crew applicable to the type of operations conducted and aircraft flown, including at least the following aircraft specific emergency subjects:

(i) emergency equipment:
(A) emergency communication and notification systems;
(B) aircraft exits;
(C) exits with slide or slide rafts (emergency operation);
(D) slides and slide rafts in a ditching;
(E) exits without slides (emergency operation);
(F) window exits (emergency operation);
(G) exits with tail cones (emergency operation);
(H) cockpit exits (emergency operation);
(I) ground evacuation and ditching equipment;
(J) first aid equipment;
(K) portable oxygen systems (oxygen bottles, chemical oxygen generators, protective breathing equipment (PBE);
(L) firefighting equipment;
(M) emergency lighting systems; and
(N) additional emergency equipment;

(ii) emergency assignments and procedures:
(A) general types of emergencies specific to aircraft;
(B) emergency communication signals and procedures;
(C) rapid decompression;
(D) insidious decompression and cracked window and pressure seal leaks;
(E) fires;
(F) ditching;
(G) ground evacuation;
(H) unwarranted evacuation (i.e., passenger initiated);
(I) illness or injury;
(J) abnormal situations involving passengers or crew-members;
(K) hijacking;
(L) bomb threat;
(M) turbulence;
(N) other unusual situations; and
(O) previous aircraft accidents and incidents;

(iii) aircraft specific emergency drills:
(A) emergency exit drill;
(B) hand fire extinguisher drill;
(C) emergency oxygen system drill;

(D) flotation device drill;
(E) ditching drill, if applicable;
(F) life raft removal and inflation drill, if applicable;
(G) slide-raft pack transfer drill, if applicable;
(H) slide or slide-raft deployment, inflation, and detachment drill, if applicable; and
(I) emergency evacuation slides drill, if applicable;

(c) a national air operator shall ensure that initial ground training for cabin crew includes a competence check to determine his or her ability to perform assigned duties and responsibilities; and

(d) a national air operator shall ensure that initial ground training for cabin crew consists of at least the following programmed hours of instruction:

(i) Multi-engine turbine: 16 hours; and
(ii) Multi-engine reciprocating: 8 hours.

3. Flight Operations Officer—

(a) a national air operator shall provide initial aircraft ground training for flight operations officers that include instruction in at least the following general dispatch subjects:

(i) normal and emergency communications procedures;
(ii) available sources of weather information;
(iii) actual and prognostic weather charts;
(iv) interpretation of weather information;
(v) adverse weather phenomena (e.g., clear air turbulence, windshear, and thunderstorms);
(vi) notices to Airmen system;
(vii) navigational charts and publications;
(viii) air traffic control and instrument procedures;
(ix) familiarization with operational area;
(x) characteristics of special aerodromes and other operationally significant aerodromes which the operator uses (i.e., terrain, approach aids, or prevailing weather phenomena);
(xi) joint flight operations officer and pilot responsibilities; and
(xii) approved Crew Resource Management (Crew Resource Management) training for flight operations officers;

(b) a national air operator shall provide initial aircraft ground training for flight operations officers that include instruction in at least the following aircraft characteristics:

(i) general operating characteristics of the national air operator's aircraft; and
(ii) aircraft specific training with emphasis on the following topics:
(A) aircraft operating and performance characteristics;
(B) navigation equipment;
(C) instrument approach and communications equipment;
(D) emergency equipment;
(iii) flight manual training; and
(iv) equipment training;

(c) a national air operator shall provide initial aircraft ground training for flight operations officers that include instruction in at least the following emergency procedures:

(i) assisting the flightcrew in an emergency; and
(ii) alerting of appropriate governmental, company and private agencies;

(d) a national air operator shall ensure that initial ground training for flight operations officers includes a competence check given by an appropriate supervisor or ground instructor that demonstrates the required knowledge and abilities.

PART E

[Regulation 235(4)]

A national air operator shall ensure that pilot initial flight training includes at least the following:

Note: *Flight training may be conducted in an appropriate aircraft or adequate training simulator (simulator shall have landing capability).*

(a) preparation:

(i) visual inspection (for aircraft with a flight engineer, use of pictorial display authorized);

(ii) pre-taxi procedures; and

(iii) performance limitations;

(b) surface operation:

(i) pushback;

(ii) power back taxi, if applicable to type of operation to be conducted;

(iii) starting;

(iv) taxi; and

(v) pre-take-off checks;

(c) take-off:

(i) normal;

(ii) crosswind;

(iii) rejected;

(iv) power failure after V_1; and

(v) lower than standard minimum, if applicable to type of operation to be conducted;

(d) climb:

(i) normal; and

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

(e) enroute:

(i) steep turns (pilot in command only);

(ii) approaches to stalls (take-off, en route, and landing configurations);

(iii) in-flight power plant shutdown;

(iv) in-flight power plant restart; and

(v) high speed handling characteristics;

(f) descent:

(i) normal; and

(ii) maximum rate;

(g) approaches:

(i) visual Flight Rules procedures;

(ii) visual approach with 50% loss of power on one-engine (2 engines; inoperative on 3-engine aeroplanes) (pilot in command only);

(iii) visual approach with slat or flap malfunction;

(iv) Instrument Flight Rules precision approaches (Instrument Landing System normal and Instrument Landing System with one engine inoperative);

(v) instrument Flight Rules non-precision approaches (Non-directional beacon normal and VHF omni Range normal); and

(vi) non-precision approach with one engine inoperative (Loaliser back course procedures, SDF and LDA, GPS, TACAN and circling approach procedures);

Note: *Simulator shall be qualified for training and checking on the circling manoeuvre.*

(vii) missed approach from precision approach;

(viii) missed approach from non-precision approach; and

(ix) missed approach with power plant failure;

(h) landings:

(i) normal with a pitch mis-trim (small aircraft only);

(ii) normal from precision instrument approach;

(iii) normal from precision instrument approach with most critical engine inoperative;

(iv) normal with 50% loss of power on one side (2 engines inoperative on 3-engine aeroplanes) (pilot in command only);

(v) normal with flap or slat malfunction;

(vi) rejected landings;

(vii) crosswind;

(viii) manual reversion or degraded control augmentation;

(ix) short or soft field (small aircraft only); and

(x) glassy or rough water (seaplanes only);

(i) after landing:

(i) parking;

(ii) emergency evacuation; and

(iii) docking, mooring and ramping (seaplanes only);

(j) other flight procedures during any airborne phase:

(i) holding;

(ii) ice accumulation on airframe;

(iii) air hazard avoidance; and

(iv) windshear and microburst;

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

(i) pneumatic or pressurization;

(ii) air conditioning;

(iii) fuel and oil;

(iv) electrical;

(v) hydraulic;

(vi) flight controls;

(vii) anti-icing and de-icing systems;

(viii) autopilot;

(ix) flight management guidance systems or automatic or other approach and landing aids;

(x) stall warning devices, stall avoidance devices, and stability augmentation systems;

(xi) airborne weather radar;

(xii) flight instrument system malfunction;
(xiii) communications equipment; and
(xiv) navigation systems;

(l) emergency systems procedures during any phase:
(i) aircraft fires;
(ii) smoke control;
(iii) power plant malfunctions;
(iv) fuel jettison;
(v) electrical, hydraulic, pneumatic systems;
(vi) flight control system malfunction; and
(vii) landing gear and flap system malfunction.

PART F

(Regulation 236)

INITIAL SPECIALIZED OPERATIONS TRAINING

A national air operator shall provide initial specialized operations training to ensure that each pilot and Flight Operations Officer is qualified in the type of operation in which he or she serves and in any specialized or new equipment, procedures and techniques, such as—

(a) Class II navigation:
(i) knowledge of specialized navigation procedures, such as MNPS; and
(ii) knowledge of specialized equipment, such as INS, LORAN, GPS;

(b) CAT II and CAT III approaches:
(i) special equipment, procedures and practice; and
(ii) a demonstration of competency;

(c) lower than standard minimum take-offs:
(i) runway and lighting requirements;
(ii) rejected take-offs at, or near, V_1 with a failure of the most critical engine;
(iii) taxi operations; and
(iv) procedures to prevent runway incursions under low visibility conditions;

(d) extended range operations with two engine aeroplanes;

(e) airborne radar approaches; and

(f) autopilot instead of co-pilot.

PART G

[Regulation 239(8)]

CONVERSION TRAINING AND CHECKING

A national air operator shall ensure that conversion training and checking meet the following requirements:

1. An operator's conversion course for flightcrew shall include:

(a) ground training and checking including aircraft systems, normal, abnormal and emergency procedures;

(b) emergency and safety equipment training and checking which shall be completed before aircraft training commences;

(c) aircraft/STD training and checking; and
(d) line flying under supervision and line check;

2. The conversion course for flightcrew shall be conducted in the order set out in sub-paragraph (1) above.

3. Elements of Crew Resource Management for flightcrew shall be integrated into the conversion course, and conducted by suitably qualified personnel.

4. When a flightcrew member has not previously completed an operator's conversion course, the operator shall ensure that in addition to sub-paragraph (1) above, the flightcrew member undergoes general first aid training and, if applicable, ditching procedures training using the equipment in water.

CABIN CREW

5. An operator shall ensure that conversion and differences training for cabin crew—

(a) is conducted by suitably qualified persons; and

(b) during conversion and differences training, training is given on the location, removal and use of all safety and survival equipment carried on the aeroplane, as well as all normal and emergency procedures related to the aeroplane type, variant and configuration to be operated.

6. Fire and smoke training; An operator shall ensure that cabin crew members are given fire and smoke training as follows:

Each cabin crew member shall be given realistic and practical training in the use of all fire fighting equipment including protective clothing representative of that carried in the aeroplane. Such training shall include the following activities:

(i) each cabin crew member extinguishing a fire characteristic of an aeroplane interior fire except that, in the case of halon extinguishers, an alternative extinguishing agent may be used; and

(ii) the donning and use of protective breathing equipment by each cabin crew member in an enclosed, simulated smoke-filled environment.

7. Operation of doors and exits; An operator shall ensure that cabin crew members are given training in the operation of aircraft doors and exits as follows:

(a) each cabin crew member shall operate and actually open all normal and emergency exits for passenger evacuation in an aircraft or representative training device; and

(b) the operation of all other exits, such as flight deck windows is demonstrated.

8. Evacuation slide training; An operator shall ensure that cabin crew members are given training in aircraft evacuation and slide training as follows:

(a) each cabin crew member descends an evacuation slide from a height representative of the aeroplane main deck sill height; and

(b) the slide is fitted to an aeroplane or a representative training device.

9. Evacuation procedures and other emergency situations. An operator shall ensure that cabin crew members are given training in evacuation procedures and other emergency situations as follows:

(a) emergency evacuation training includes the recognition of planned or unplanned evacuations on land or water. This training shall include recognition of when exits are unusable or when evacuation equipment is unserviceable; and

(b) each cabin crew member is trained to deal with the following:
  (i) an in-flight fire, with particular emphasis on identifying the actual source of the fire;
  (ii) severe air turbulence;
  (iii) sudden decompression, including the donning of portable oxygen equipment by each cabin crew member; and
(c) other in-flight emergencies.

10. Crowd control; An operator shall ensure cabin crew members are given training on the practical aspects of crowd control in various emergency situations, as applicable to the aeroplane type.

11. Pilot incapacitation; An operator shall ensure that cabin crew members are trained to render assistance where a pilot becomes incapacitated. This training shall include a demonstration of:
(a) the pilot's seat mechanism;
(b) fastening and unfastening the pilot's seat harness;
(c) use of the pilot's oxygen equipment; and
(d) use of pilots' checklists.

12. Safety equipment; An operator shall ensure that each cabin crew member is given realistic training on, and demonstration of, the location and use of safety equipment including the following:
(a) slides, and where non self-supporting slides are carried, the use of any associated ropes;
(b) life-rafts and slide-rafts, including the equipment attached to or carried in, the raft;
(c) lifejackets, infant lifejackets and flotation cots;
(d) dropout oxygen system;
(e) first-aid oxygen;
(f) fire extinguishers;
(g) fire axe or crow-bar;
(h) emergency lights including torches;
(i) communications equipment, including megaphones;
(j) survival packs, including their contents;
(k) pyrotechnics (actual or representative devices);
(l) first-aid kits, their contents and emergency medical equipment; and
(m) other cabin safety equipment or systems where applicable.

13. Passenger Briefing and Safety Demonstrations; An operator shall ensure that cabin crew members are given training in the preparation of passengers for normal and emergency situations in accordance these Regulations.

14. An operator shall ensure that all appropriate Regulatory requirements are included in the training of cabin crew members.

PART H

[Regulation 240(5)]

The Aircraft and Instrument Proficiency Check for a Pilot shall contain the following:
(a) satisfactory completion of a pilot in command proficiency check following completion of an approved air operator training programme for the particular type aircraft, satisfies the requirement for an aircraft type rating practical test if—

(i) that proficiency check includes all manoeuvres and procedures required for a type rating practical test; and

(ii) proficiency checks are conducted by a check airman.

(b) aircraft and instrument proficiency checks for pilot in command and co-pilot shall include the following operations and procedures listed in Table A. As noted, check airmen may waive certain events on the flight test based on an assessment of the pilot's demonstrated level of performance.

Table A

TYPE OF OPERATION OR PROCEDURE	PIC or Co-Pilot	Notes
Ground Operations		
Preflight inspection	PIC and Co-Pilot	
Taxiing	PIC and Co-Pilot	Both pilots may take simultaneous credit
Powerplant checks	PIC and Co-Pilot	Both pilots may take simultaneous credit
Take-offs		
Normal	PIC and Co-Pilot	
Instrument	PIC and Co-Pilot	
Crosswind	PIC and Co-Pilot	
With powerplant failure	PIC and Co-Pilot	
Rejected take-off	PIC and Co-Pilot	Both pilots may take simultaneous credit. May be waived
Instrument Procedures		
Area departure	PIC and Co-Pilot	May be waived
Area arrival	PIC and Co-Pilot	May be waived
Holding	PIC and Co-Pilot	May be waived
Normal ILS approach	PIC and Co-Pilot	
Engine-out ILS	PIC and Co-Pilot	
Coupled ILS approach	PIC and Co-Pilot	Both pilots may take simultaneous credit.
Nonprecision approach	PIC and Co-Pilot	
Second nonprecision approach	PIC and Co-Pilot	
Missed approach from an ILS	PIC and Co-Pilot	
Second missed approach	PIC only	
Circling approach	PIC and Co-Pilot	Only when authorized in the AOC holder's Operations Manual. May be waived
Inflight Manoeuvres		
Steep turns	PIC only	May be waived
Specific flight characteristics	PIC and Co-Pilot	
Approaches to stalls	PIC and Co-Pilot	May be waived
Powerplant failure	PIC and Co-Pilot	
2 engine inoperative approach (3 and 4 engine aircraft)	PIC and Co-Pilot	
Normal landing	PIC and Co-Pilot	
Landing from an ILS	PIC and Co-Pilot	
Crosswind landing	PIC and Co-Pilot	
Landing with engine-out	PIC and Co-Pilot	
Landing from circling approach	PIC and Co-Pilot	Only if authorized in Operations Manual May be waived.
Normal and Non-Normal Procedures	PIC and Co-Pilot	
Rejected landing	PIC and Co-Pilot	
2 engine inoperative landing (3 and 4 engine aircraft)	PIC only	
Other Events	PIC and Co-Pilot	Check airman's discretion

(c) the oral and flight test phases of a proficiency check should not be conducted simultaneously.

(d) when the check airman determines that an applicant's performance is unsatisfactory, the check airman may terminate the flight test immediately or, with the consent of the applicant, continue with the flight test until the remaining events are completed.

(e) where the check is terminated for mechanical or other reasons, and there are events which still need to be repeated, the check airman shall issue a letter of discontinuance, valid for 60 days, listing the specific areas of operation that have been successfully completed.

PART I

(Regulation 242)

The training and checking programme for a pilot to operate in either pilot seat shall take the following matters into consideration:

(a) a pilot in command whose duties also requires him to operate in the co-pilot seat and carry out the duties of co-pilot, or pilot in command required to conduct training or examining duties from the co-pilot seat, shall complete additional training and checking as specified in the Operations Manual, concurrent with the operator proficiency checks prescribed in these Regulations. This additional training shall include at least the following:

(i) an engine failure during take-off;

(ii) a one-engine inoperative approach and go-around; and

(iii) a one-engine inoperative landing.

(b) when engine-out manoeuvres are carried out in an aircraft, the engine failure shall be simulated.

(c) when operating in the right-hand seat, the checks required for operating in the left-hand seat shall, in addition, be valid and current.

(d) a pilot relieving the pilot in command shall have demonstrated, concurrent with the operator proficiency checks prescribed in these Regulations, practice of drills and procedures which would not, normally, be the relieving pilot's responsibility. Where the differences between left and right seats are not significant (for example, because of use of autopilot) then practice may be conducted in either seat.

(e) a pilot other than the pilot in command occupying the left-hand seat shall demonstrate practice of drills and procedures, concurrent with the operator proficiency checks prescribed in these Regulations, which would otherwise have been the pilot in command's responsibility acting as pilot non-flying. Where the differences between left and right seats are not significant (for example, because of use of autopilot) then practice may be conducted in either seat.

PART J

(Regulation 248)

Flight Engineer proficiency check shall include the following:

Examiners shall include during proficiency checks for flight engineers an oral or written examination of the normal, abnormal, and emergency procedures listed below:

(a) normal procedures:

(i) interior pre-flight;

(ii) panel set-up;

(iii) fuel load;

(iv) engine start procedures;

(v) taxi and before take-off procedures;

(vi) take-off and climb pressurization;

(vii) cruise and fuel management;
(viii) descent and approach;
(ix) after landing and securing;
(x) crew co-ordination;
(xi) situational awareness, traffic scan, etc.;
(xii) performance computations; and
(xiii) anti-ice, de-ice;

(b) abnormal and emergency procedures:
(i) troubleshooting;
(ii) knowledge of checklist;
(iii) ability to perform procedures;
(iv) crew co-ordination;
(v) minimum equipment list and configuration deviation list; and
(vi) emergency or alternate operation of aircraft flight systems.

PART K

(Regulation 249)

Cabin Crew competency check shall include the following:

Examiners shall include during each cabin crew competency check a demonstrated knowledge of:

(a) emergency equipment:
(i) emergency communication and notification systems;
(ii) aircraft exits;
(iii) exits with slides or slide rafts (emergency operation);
(iv) slides and slide rafts in a ditching;
(v) exits without slides (emergency operation);
(vi) window exits (emergency operation);
(vii) exits with tail cones (emergency operation);
(viii) cockpit exits (emergency operation);
(ix) ground evacuation and ditching equipment;
(x) first-aid equipment;
(xi) portable oxygen systems [oxygen bottles, chemical oxygen generators, protective breathing equipment (pbe)];
(xii) fire-fighting equipment;
(xiii) emergency lighting systems; and
(vx) additional emergency equipment;

(b) emergency procedures:
(i) general types of emergencies specific to aircraft;
(ii) emergency communication signals and procedures;
(iii) rapid decompression;
(iv) insidious decompression and cracked window and pressure seal leaks;
(v) fires;
(vi) ditching;
(vii) ground evacuation;
(viii) unwarranted evacuation (i.e., passenger initiated);
(ix) illness or injury;

(x) abnormal situations involving passengers or crewmembers;

(xi) turbulence; and

(xii) other unusual situations;

(c) emergency drills:

(i) location and use of all emergency and safety equipment carried on the aircraft;

(ii) the location and use of all types of exits;

(iii) actual donning of a lifejacket where fitted;

(iv) actual donning of protective breathing equipment; and

(v) actual handling of fire extinguishers;

(d) crew resource management:

(i) decision making skills;

(ii) briefings and developing open communication;

(iii) inquiry, advocacy and assertion training; and

(iv) workload management;

(e) dangerous goods:

(i) recognition of and transportation of dangerous goods;

(ii) proper packaging, marking and documentation; and

(iii) instructions regarding compatibility, loading, storage and handling characteristics;

(f) security:

(i) hijacking; and

(ii) disruptive passengers;

(g) elements of training which require individual practical participation should be combined with practical checks;

(h) the checks required by the Act or Regulations made thereunder shall be accomplished by the method appropriate to the type of training including—

(i) practical demonstration; and/or

(ii) computer based assessment; and/or

(iii) in-flight checks; and

(iv) oral or written tests.

PART L

(Regulation 250)

Flight Operations Officers competency check shall include the following:

(a) evaluators shall conduct competency checks for a Flight Operations Officer to demonstrate that the candidate's proficiency level is sufficient to ensure the successful outcome of all dispatch operations;

(b) a qualified supervisor or inspector, approved by the authority, shall observe and evaluate competency checks for a Flight Operations Officer;

(c) each competency check for a Flight Operations Officer shall include—

(i) an evaluation of all aspects of the dispatch function;

(ii) a demonstration of the knowledge and abilities in normal and abnormal situations; and

(iii) an observation of actual flights being dispatched;

(d) each evaluator of newly hired Flight Operations Officer shall include during initial competency checks an evaluation of all of geographic areas and types of aircraft the Flight Operations Officer will be qualified to dispatch. (Note: The supervisor may approve a competency check of representative aircraft types when, in the supervisor's judgement, a check including all types is impractical or unnecessary);

(e) evaluators may limit initial equipment and transition competency checks solely to the dispatch of the types of aeroplanes on which the Flight Operations Officer is qualifying (unless the check is to simultaneously count as a recurrent check);

(f) each evaluator of a Flight Operations Officer shall include, during recurrent and requalification competency checks, a representative sample of aircraft and routes for which the Flight Operations Officer maintains current qualification; and

(g) The Authority requires special operations competency checks before a Flight Operations Officer is qualified in ETOPS or other special operations authorized by the Authority.

PART M

(Regulation 253)

Supervised line experience for Cabin Crew shall include the following:

The following areas of operation are required for supervised line experience for cabin crew:

New entrant Cabin Crew

(a) Each new entrant cabin crew member having no previous comparable operating experience should—

(i) participate in a visit to the aircraft to be operated; and

(ii) participate in familiarization flights as described in paragraph *(c)* below.

Cabin crew operating on a subsequent aircraft type

(b) A cabin crew member assigned to operate on a subsequent aircraft type with the same operator should either—

(i) participate in a familiarization flight as described in paragraph 3 below; or

(ii) participate in an aircraft visit to the aircraft to be operated;

(c) for familiarization flights the following:

(i) during familiarization flights, the cabin crew member should be additional to the minimum number of cabin crew required under the Act or Regulations made thereunder;

(ii) familiarization flights should be conducted under the supervision of the senior cabin crew member;

(iii) familiarization flights should be structured and involve the cabin crew member in the participation of safety related pre-flight, in-flight and post-flight duties;

(iv) familiarization flights should be operated with the cabin crew member in the operator's uniform; and

(v) familiarization flights should form part of the training record for each cabin crew member.

Aircraft visits:

(d) The purpose of aircraft visits is to familiarize each cabin crew member with the aircraft environment and its equipment. Accordingly, aircraft visits should be conducted by suitably qualified persons and in accordance with a syllabus described in the Operations Manual, Part D. The aircraft visit should provide an overview of the aircraft's exterior, interior and systems including the following:

(i) interphone and public address systems;
(ii) evacuation alarm systems;
(iii) emergency lighting;
(iv) smoke detection systems;
(v) safety/emergency equipment;
(vi) flight deck;
(vii) cabin crew stations;
(viii) toilet compartments;
(ix) galleys, galley security and water shut-off;
(x) cargo areas if accessible from the passenger compartment during flight;
(xi) circuit breaker panels located in the passenger compartment;
(xii) crew rest areas; and
(xiii) exit location and its environment.

PART N

(Regulation 260)

RECURRENT TRAINING FOR FLIGHTCREW

A national air operator shall ensure that flight crew member recurrent ground training includes at least the following:

(a) general subjects:

(i) flight locating procedures;
(ii) principles and method for determining mass and balance and runway limitations;
(iii) meteorology to ensure practical knowledge of weather phenomena including the principles of frontal system, icing, fog, thunderstorms, windshear and high altitude weather situations;
(iv) ATC systems and phraseology;
(v) navigation and use of navigational aids;
(vi) normal and emergency communication procedures;
(vii) visual cues before descent to MDA;
(viii) accident, incident and occurrence review; and
(ix) other instructions necessary to ensure the pilot's competence;

(b) aircraft systems and limitations:

(i) normal, abnormal and emergency procedures;
(ii) aircraft performance characteristics;
(iii) engines and or propellers;
(iv) major aircraft components;

(v) major aircraft systems (i.e., flight controls, electric, hydraulic and other systems as appropriate); and

(vi) ground icing and de-icing procedures and requirements;

(c) emergency equipment and drills;

(d) every twelve months:

(i) location and use of all emergency and safety equipment carried on the aircraft;

(ii) the location and use of all types of exits;

(iii) actual donning of a lifejacket where fitted;

(iv) actual donning of protective breathing equipment; and

(v) actual handling of fire extinguishers;

(e) every three years:

(i) operation of all types of exits;

(ii) demonstration of the method used to operate a slide, where fitted;

(iii) fire-fighting using equipment representative of that carried in the aircraft on an actual or simulated fire;

Note: with halon extinguishers, an alternative method acceptable to the authority may be used.

(iv) effects of smoke in an enclosed area and actual use of all relevant equipment in a simulated smoke-filled environment;

(v) actual handling of pyrotechnics, real or simulated, where fitted;

(vi) demonstration in the use of the life-raft(s), where fitted;

(vii) an emergency evacuation drill;

(viii) a "dry" ditching drill; and

(ix) a rapid decompression drill, if applicable;

(f) every twelve months, crew resource management:

(i) decision making skills;

(ii) briefings and developing open communication;

(iii) inquiry, advocacy and assertion training;

(iv) workload management; and

(v) situational awareness;

(g) every twenty-four months, dangerous goods:

(i) recognition of and transportation of dangerous goods;

(ii) proper packaging, marking and documentation; and

(iii) instructions regarding compatibility, loading, storage and handling characteristics;

(h) every twelve months, security:

(i) hijacking; and

(ii) disruptive passengers;

(i) a national air operator shall verify knowledge of the recurrent ground training by an oral or written examination;

(j) a national air operator shall ensure that pilot recurrent flight training include at least the following:

Note: *Flight Training may be conducted in an Appropriate Aircraft or Adequate Training Simulator (Simulator shall have Landing Capability).*

(i) preparation:
  (A) visual inspection (use of pictorial display authorized); and
  (B) pre-taxi procedures;

(ii) surface operation:
  (A) performance limitations;
  (B) cockpit management;
  (C) securing cargo;
  (D) pushback;
  (E) powerback taxi;
  (F) starting;
  (G) taxi; and
  (H) pre-take-off checks;

(iii) take-off:
  (A) normal;
  (B) crosswind;
  (C) rejected;
  (D) power failure after V_1;
  (E) power plant failure during second segment; and
  (F) lower than standard minimum;

(iv) climb:
  (A) normal; and
  (B) one-engine inoperative during climb to en route altitude;

(v) en route:
  (A) steep turns;
  (B) approaches to stalls (take-off, en route, and landing configurations);
  (C) in-flight power plant shutdown;
  (D) in-flight power plant restart; and
  (E) high-speed handling characteristics;

(vi) descent:
  (A) normal; and
  (B) maximum rate;

(vii) approaches:
  (A) visual flight rules procedures;
  (B) visual approach with 50% loss of power on one-engine (2 engines inoperative on 3-engine aeroplanes) (pilot in command only);
  (C) visual approach with slat or flap malfunction;
  (D) instrument flight rules precision approaches (instrument landing system normal and instrument landing system with one-engine inoperative);
  (E) instrument flight rules non-precision approaches (non-directional beacon normal and vhf omni range normal); and
  (F) non-precision approach with one engine inoperative (localizer back course, SDF or LDA, GPS, TACAN and circling approach procedures);

  Note: Simulator shall be qualified for training and checking on the circling manoeuvre.

  (G) missed approach from precision approach;
  (H) missed approach from non-precision approach; and

(I) missed approach with power plant failure.

(viii) landings:

(A) normal with a pitch mis-trim (small aircraft only);

(B) normal from precision instrument approach;

(C) normal from precision instrument approach with most critical engine inoperative;

(D) normal with 50% loss of power on one side (2 engines inoperative on 3-engine aeroplanes) (pilot in command only);

(E) normal with flap or slat malfunction;

(F) rejected landings;

(G) crosswind;

(H) short or soft field (small aircraft only); and

(I) glassy or rough water (seaplanes only);

(ix) after landing:

(A) parking;

(B) emergency evacuation; and

(C) docking, mooring and ramping (seaplanes only);

(x) other flight procedures during any airborne phase:

(i) holding;

(ii) ice accumulation on airframe;

(iii) air hazard avoidance; and

(iv) windshear and microburst;

(xi) normal, abnormal and alternate systems procedures during any phase:

(A) pneumatic or pressurization;

(B) air conditioning;

(C) fuel and oil;

(D) electrical; and

(E) hydraulic;

(xii) flight controls:

(A) anti-icing and de-icing systems;

(B) flight management guidance systems or automatic or other approach and landing aids;

(C) stall warning devices, stall avoidance devices, and stability augmentation systems;

(D) airborne weather radar;

(E) flight instrument system malfunction;

(F) communications equipment;

(G) navigation systems;

(H) auto-pilot;

(I) approach and landing aids; and

(J) flight instrument system malfunction;

(xiii) emergency systems procedures during any phase:

(A) aircraft fires;

(B) smoke control;

(C) power plant malfunctions;

(D) fuel jettison;

(E) electrical, hydraulic, pneumatic systems;

(F) flight control system malfunction; and

(G) landing gear and flap system malfunction;

(k) the national air operator may combine training with the national air operator's proficiency check.

(l) the national air operator shall ensure that the aeroplane or flight simulator training programme is established such that all major failures of aeroplane systems and associated procedures will have been practiced in the preceding three-year period.

(m) recurrent ground and flight training curricula may be accomplished concurrently or intermixed, but completion of each of these curricula shall be recorded separately.

PART O

(Regulation 261)

Recurrent Training for Cabin Crew

The current training for cabin crew shall meet the following requirements:

(a) a national air operator shall ensure that, every twelve months, each cabin crew receive recurrent training in at least the following:

(vii) emergency equipment:

(A) emergency communication and notification systems;
(B) aircraft exits;
(C) exits with slides or slide rafts (emergency operation);
(D) slides and slide rafts in a ditching;
(E) exits without slides (emergency operation);
(F) window exits (emergency operation);
(G) exits with tail cones (emergency operation);
(H) cockpit exits (emergency operation);
(I) ground evacuation and ditching equipment;
(J) first aid equipment;
(K) portable oxygen systems (oxygen bottles, chemical oxygen generators, protective breathing equipment (PBE));
(L) firefighting equipment;
(M) emergency lighting systems; and
(N) additional emergency equipment;

(ii) emergency procedures:

(A) general types of emergencies specific to aircraft;
(B) emergency communication signals and procedures;
(C) rapid decompression;
(D) insidious decompression and cracked window and pressure seal leaks;
(E) fires;
(F) ditching;
(G) ground evacuation;
(H) unwarranted evacuation (i.e., passenger initiated);
(I) illness or injury;
(J) abnormal situations involving passengers or crew members;
(K) turbulence; and
(L) other unusual situations; and
(M) emergency drills;

(iii) every twelve months:
- (A) location and use of all emergency and safety equipment carried on the aircraft;
- (B) the location and use of all types of exits;
- (C) actual donning of a lifejacket where fitted;
- (D) actual donning of protective breathing equipment; and
- (E) actual handling of fire extinguishers;

(iv) every three years;
- (A) operation of all types of exits;
- (B) demonstration of the method used to operate a slide, where fitted; and
- (C) fire-fighting using equipment representative of that carried in the aircraft on an actual or simulated fire;

Note: With Halon extinguishers, an alternative method acceptable to the Authority may be used.

- (D) effects of smoke in an enclosed area and actual use of all relevant equipment in a simulated smoke-filled environment;
- (E) actual handling of pyrotechnics, real or simulated, where fitted;
- (F) demonstration in the use of the life-raft(s), where fitted;
- (G) an emergency evacuation drill;
- (H) a "dry" ditching drill, if applicable;
- (I) a rapid decompression drill, if applicable;

(v) every twelve months, crew resource management:
- (A) decision-making skills;
- (B) briefings and developing open communication;
- (C) inquiry, advocacy and assertion training; and
- (D) workload management;

(vi) every twenty-four months, dangerous goods:
- (A) recognition of and transportation of dangerous goods;
- (B) proper packaging, marking and documentation; and
- (C) instructions regarding compatibility, loading, storage and handling characteristics.

(vii) every twelve months, security:
- (i) hijacking; and
- (ii) disruptive passengers.

(b) a national air operator may administer each of the recurrent training curricula concurrently or intermixed, but shall record completion of each of these curricula separately.

(c) a national air operator should ensure that a formalised course of recurrent training is provided for cabin crew in order to ensure continued proficiency with all equipment relevant to the aircraft types that they operate.

PART P

(Regulation 264)

Flight Instructor Training

1. Within the preceding twenty-four calendar months, that person satisfactorily conducts instruction under the observation of an inspector from the Authority, a national air operator's check airman, or an examiner employed by the national air operator.

2. A national air operator may accomplish the observation check for a flight instructor, in part or in full, in an aircraft, a flight simulator, or a flight training device.

3. A national air operator shall ensure that initial ground training for flight instructors includes the following:

(a) flight instructor duties, functions and responsibilities;

(b) applicable regulations and the national air operator's policies and procedures;

(c) appropriate methods, procedures and techniques for conducting the required checks;

(d) proper evaluation of student performance including the detection of—

(i) improper and insufficient training, and

(ii) personal characteristics of an applicant that could adversely affect safety;

(e) appropriate corrective action in the case of unsatisfactory checks;

(f) approved methods, procedures, and limitations for performing the required normal, abnormal and emergency procedures in the aircraft;

(g) except for holders of a flight instructor licence—

(i) the fundamental principles of the teaching-learning process;

(ii) teaching methods and procedures; and

(iii) the instructor-student relationship;

4. A national air operator shall ensure that the transition ground training for flight instructors includes the approved methods, procedures, and limitations for performing the required normal, abnormal and emergency procedures applicable to the aircraft to which the flight instructor is in transition.

5. A national air operator shall ensure that the initial and transition flight training for Flight Instructors includes the following:

(a) the safety measures for emergency situations that are likely to develop during instruction.

(b) the potential results of improper, untimely, or non-execution of safety measures during instruction.

(c) for pilot flight instructor:

(i) inflight training and practice in conducting flight instruction from the left and right pilot seats in the required normal, abnormal and emergency procedures to ensure competence as an instructor; and

(ii) the safety measures to be taken from either pilot seat for emergency situations that are likely to develop during instruction.

(d) for Flight Instructors assigned to Flight Engineer instruction, in-flight training to ensure competence to perform assigned duties.

6. A national air operator may accomplish the flight training requirements for Flight Instructors in full or in part in flight, in a flight simulator, or in a flight training device, as appropriate.

7. A national air operator shall ensure that the initial and transition flight training for Simulator Flight Instructors includes the following:

(a) training and practice in the required normal, abnormal and emergency procedures to ensure competence to conduct the flight instruction required by this part. This training and practice shall be accomplished in full or in part in a flight simulator or in a flight training device.

(b) training in the operation of flight simulators or flight training devices, or both, to ensure competence to conduct the flight instruction required by this Part.

PART Q

(Regulation 266)

INITIAL GROUND TRAINING CHECK AIRMAN

1. A national air operator shall ensure that initial ground training for check airman includes:

(a) check airman duties, functions, and responsibilities;

(b) applicable regulations and the national air operator's policies and procedures;

(c) appropriate methods, procedures, and techniques for conducting the required checks;

(d) proper evaluation of student performance including the detection of—

(i) improper and insufficient training, and

(ii) personal characteristics of an applicant that could adversely affect safety;

(e) appropriate corrective action in the case of unsatisfactory checks; and

(f) approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aeroplane.

2. Transition ground training for all check airmen shall include the approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures applicable to the aeroplane to which the check airman is in transition.

3. A national air operator shall ensure that the initial and transition flight training for check airmen (aeroplane) includes—

(a) training and practice in conducting flight evaluations (from the left and right pilot seats for pilot check airmen) in the required normal, abnormal, and emergency procedures to ensure competence to conduct the flight checks;

(b) the potential results of improper, untimely, or non-execution of safety measures during an evaluation; and

(c) the safety measures (to be taken from either pilot seat for pilot check airmen) for emergency situations that are likely to develop during an evaluation.

4. A national air operator shall ensure that the initial and transition flight training for Simulator check airmen includes—

(a) training and practice in conducting flight checks in the required normal, abnormal, and emergency procedures to ensure competence to conduct the evaluations checks required by this part (this training and practice shall be accomplished in a flight simulator or in a flight training device); and

(b) training in the operation of flight simulators or flight training devices, or both, to ensure competence to conduct the evaluations required by this Part.

5. A national air operator may accomplish flight training for check airmen in full or in part in an aircraft, in a flight simulator, or in a flight training device, as appropriate.

SCHEDULE 10

(Regulation 290)

EXAMPLE FLIGHT AND DUTY TIME SCHEME—AEROPLANE OPERATIONS

REST PERIODS, DUTY, AND FLIGHT TIME: COMMERCIAL AIR TRANSPORT—AEROPLANE

Applicability

1. The scheme shall apply in relation to any duty carried out at the behest of the national air operator by both flightcrew and cabin crew.

Responsibilities

2. (1) A national air operator shall have a scheme for the regulation of flight times of crews. The scheme shall be approved by the Authority and included in the national air operator's Operations Manual. The Operations Manual shall be readily available to every person employed by the national air operator as a member of an aircraft crew.

(2) A crew member shall not fly, and an operator shall not require him to fly, if 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 aeroplane or of its occupants.

(3) A flightcrew member shall inform the operator of all flying undertaken so that the cumulative flight and duty times can be assessed against the limitations contained in this section.

(4) The national air operator will publish crew rosters showing planned duty sufficiently in advance so that operating crews can plan adequate pre-duty rest.

(5) The national air operator and crew member are jointly responsible for the proper control of flight and duty times. A crew member has the responsibility to make optimum use of the opportunities and rest facilities provided. He is responsible for planning and using his rest periods properly in order to minimize the risk of incurring fatigue.

(6) A crew member shall not act as operating crew if he knows or suspects that his physical or mental condition renders him unfit to operate.

Definitions

3. For the purpose of this clause—

"calendar day" means the period of elapsed time using Co-ordinated Universal Time or local time that begins at midnight and ends twenty-four hours later at the next midnight;

"days off" means the periods available for leisure and relaxation free from all duties. A rest period may be included as part of a day off;

"dispatch crew" means a fully qualified and current flightcrew or cabin crew 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;

"flightcrew" means those members of the crew of an aircraft who act as pilot or pilot engineer;

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

"fight duty period" means any time during which a person operates in an aircraft as a member of its crew. It starts when the crew member is required by the national air operator to report for a flight and finishes at the end of the flight time on the final sector. This term is used interchangeably with flying duty period and flight duty time;

"minimum rest period" means a period during which a flightcrew member is free from all duties, is not interrupted by the national air operator or private operator, and is provided with an opportunity to obtain not less than eight consecutive hours of sleep in suitable accommodation, time to travel to and from that accommodation and time for personal hygiene and meals;

"positioning" means the practice of transferring crews from place to place as passengers in surface or air transport on behalf of the national air operator. Positioning time counts as duty time;

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

"rest period" means a period of time before starting a flight 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 planned 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 series of planned duty periods;

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

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

"standby" means a flightcrew 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;

"reserve duty" means a period during which the national air operator places restraints on a crew member who would otherwise be off duty;

"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

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

Monitoring System

4. (1) A national air operator shall establish a system that monitors the flight time, flight duty time and rest periods of each of its flightcrew members and shall include in its company operations manual the details of that system.

(2) Where a person becomes aware that an assignment by a national air operator to act as a flightcrew member on a flight would result in the maximum flight time or the maximum flight duty time specified in these Regulations being exceeded, the person shall so notify the national air operator.

5. A crew member shall not act as a member of the operating crew if he knows, or suspects, that his physical or mental condition renders him unfit to operate. A crew member shall not fly if he knows that he is or is likely to be, in breach of this section.

Calculation of a flight duty period

The maximum flight duty period, in hours and fractions of hours, will be in accordance with paragraph 17. The times extracted may be extended at the discretion of the pilot in command under the terms of paragraphs 18 and 19 and 30 as applicable.

Additional Limits on flying early starts

7. A flightcrew member should normally not be rostered to operate more than three consecutive days where duties start or finish in any part of the period 0001 to 0559 local time. There will be no more than four such duties in seven consecutive days.

8. However, when a crew member is in suitable accommodation provided by the company which is less than sixty minutes travelling time of the reporting point, then 0559 may be changed to 0459 local time.

9. Should any duties be scheduled to be carried out within any part of the period 0200 to 0459 local time, for a maximum of three consecutive nights, then a crew member will finish the duty preceding this series by 2100 hours local time before covering the block of consecutive night duties. However, if the preceding duty period extends beyond 2100 hours local time but not later than 2259 hours due to an unforeseen delay the crew member is expected to operate the scheduled flight.

Mixed duties

10. When a crew member is required to report for duty in advance of the stipulated report time for a scheduled flight, to carry out a task on behalf of the national air operator, then the time spent on that task shall be part of the subsequent flight duty period.

Mixed simulator and aircraft flying

11. When a crew member flies in the simulator, either on a check or training, or as an Instructor or check airman, and when within the same duty period he operates as a flightcrew member in commercial air transport operations, all the flight time and flight duty time spent in the simulator is counted in full towards the subsequent flight duty period and for helicopters towards the daily flying hour maxima. Simulator flying does not count as a sector, but the flight duty period allowable is calculated from one hour prior to the scheduled simulator start time.

Positioning and combinations of flying and other duty

12. All time spent on positioning as required by the operator shall count as duty but does not count as a sector when calculating the maximum allowable flight duty period. In such circumstances the flight duty period commences at the time at which the crew member reports for the positioning journey.

13. Positioning, any form of ground duty and standby duty at an airport which immediately preceded flight duty, shall be included in the flight duty period and be subject to maximum allowable flight duty period limits specified. Positioning and ground duties immediately following a flight duty shall not be part of the flight duty period, but shall count in computing the length of the subsequent rest period. The time spent between reporting for a flight and the completion of post flight tasks determines the length of the subsequent rest period.

14. If, after the positioning journey, a crew member spends less than the minimum rest period at a suitable accommodation provided by the national air operator, and then carries out the flight duty period, the positioning will be counted as a sector if a split duty is claimed when calculating the allowable flight duty period. If it is not, a split duty flight duty period will not be used.

Reserve Duty

15. When at home or in suitable accommodation provided by the national air operator, crew members may be on reserve duty for twenty-four hours but the time of start, end and nature of the reserve duty will be defined to crew members so that they can plan their rest.

16. When a crew member is required to be on standby at the airport or a designated reporting place, the flight duty period commences at the reported time.

Maximum flight duty period—aeroplanes

17. The maximum flight duty periods for aeroplane crews is shown in the tables below—

TWO (2) PILOT CREW—AEROPLANE

Local Time at Start	Sectors									
	1	2	3	4	5	6	7	8	9	10 or more
0600–1259	14	14	14	13	12	11	10	10	9	9
1300–1759	14	14	13¼	12½	11¾	11	10	10	9	9
1800–2159	14	13¼	12½	11¾	11	10	10	10	9	9
2200–0559	12	11½	10¾	10	10	10	10	10	9	9

TWO (2) PILOTS AND ONE (1) FLIGHT ENGINEER—AEROPLANE

Local Time at Start	Sectors							
	1	2	3	4	5	6	7	8 or more
0600–1259	14	14	14	13½	12½	11	10	10
1300–2159	14	14	13½	12¾	12½	11	10	10
2200–0559	12	12	11½	11	11	11	10	9

SINGLE (1) PILOT CREW—AEROPLANE

Local Time at Start	Sectors				
	Up to 4	5	6	7	8 or more
0600–1259	10	9¼	8½	8	8
1300–1759	11	10¼	9½	8¾	8
1800–2159	10	9¼	8½	8	8
2200–0559	9	8¼	8	8	8

Extension of maximum rostered flight duty period by augmented crew—aeroplanes

18. When an augmented crew is used to extend the maximum flight duty period the additional crew member or members shall hold qualifications which meet the requirements of the operational duty he will perform. The qualifications shall be specified by the operator and approved by the Authority.

19. Where a flightcrew is augmented by the addition of at least one flightcrew member, the division of duty and rest is balanced between the flightcrew members and, when a flight relief facility is provided, flight duty time may be extended if—

(a) where a flight relief facility—seat is provided, the flight duty time may be extended to sixteen consecutive hours, in which case the maximum flight deck duty time for any flightcrew member shall be twelve hours;

(b) where a flight relief facility—bunk is provided, the flight duty time may be extended to twenty consecutive hours, in which case the maximum flight deck duty time for any flightcrew member shall be fourteen hours;

(c) the subsequent minimum rest period shall be at least equal to the length of the preceding flight duty time; and

(d) a maximum of three sectors may be completed.

20. Where a flightcrew is augmented by the addition of at least one flightcrew member, the total flight time accumulated during the flight shall be logged by all flightcrew members for the purposes of calculating the maximum flight times.

Extensions of flight duty period by split duty

21. When a flight duty period consists of two or more sectors—of which one can be a positioning journey counted as a sector—but separated by less than a minimum rest period, then the flight duty period will extend by the amounts indicated below.

Consecutive Hours Rest	*Maximum Extension of the FDP*
Less then 3	NIL
3–10	A period equal to half the consecutive hours rest taken.

22. The rest period shall not include the time allowed for immediate post and pre-flight duties. When the rest period is less than six hours it will suffice if a quiet and comfortable place, not open to the public, is available. If rest is to be taken in the aircraft on the ground, the crew shall have adequate control of the temperature and ventilation. Passengers shall not be on board. If the rest period is more than six consecutive hours, then suitable accommodation shall be provided.

Delayed reporting time

23. When a crew member is informed of a delay before leaving his place of rest the flight duty period shall start at the new reporting time, or three hours after the original reporting time, whichever is the earlier. This paragraph shall not apply if the crew member is given ten hours or more notice of a new reporting time.

Rest periods

24. The national air operator shall endeavour to notify the crew member of a flight duty period assignment in good time so that sufficient pre-flight rest can be obtained. When away from base, opportunities and facilities for adequate pre-flight rest will be provided by the national air operator.

25. The minimum rest period which shall be provided prior to a flight duty period shall be—

(a) at least as long as the preceding duty period, or

(b) eleven hours

whichever is greater.

Note: *The minimum rest period of eleven hours includes travel time to and from the rest facility, hotel check-in and check-out time and time for personal hygiene and meals allowing eight consecutive hours of sleep opportunity in suitable accommodation. If any of the variables is longer than expected, or there is any further delay in the crews being afforded the required eight hours sleep opportunity, the minimum rest shall be increased accordingly.*

26. If the preceding duty period exceeded sixteen hours, the minimum rest shall be no less than sixteen hours plus two hours for every hour or part of an hour that the previous duty period exceeded sixteen hours.

27. Following a sequence of reduced rest and extended flight duty period the subsequent rest period shall not be reduced.

28. At least thirty-six consecutive hours rest each seven days or one period of at least three consecutive days within each seventeen consecutive days shall be provided. These rest periods may be taken on layovers in suitable accommodation.

29. Following any three consecutive twenty-four hours periods in which there have been three periods of twelve hours or more of flight duty, the flightcrew member shall have twenty-four hour of uninterrupted rest.

30. Following any two consecutive twenty-four hour periods during which there have been two (2) fifteen hours of flight duty the flightcrew shall have thirty hours uninterrupted rest.

31. A crew member who has difficulty in achieving adequate pre-flight rest shall inform the Head of Flight Operations and will be given the opportunity to seek medical assistance.

Pilot in command discretion to extend a flight duty period in unforeseen circumstances

32. The pilot in command may, at his discretion, and after taking note of the circumstances of other members of the crew, extend a flight duty period in unforseen circumstances, beyond that permitted in paragraph 17, provided he is satisfied that the flight can be made safely. The extension shall be calculated according to what actually happens, not on what was planned to happen. An extension of two hours is the maximum permitted, except in cases of emergency.

Note: *In respect of an extension to a flight duty, an emergency is a situation which in the judgement of the pilot in command presents a serious risk to the health or safety of crew and passengers, or endangers the lives of others.*

33. Whenever a pilot in command extends a flight duty period, he shall report it to the national air operator on a Discretion Report Form acceptable to the Authority. If the extension is greater than one hours, or when exercised after any reduced rest period, then the operator shall submit the pilot in command's written report together with the operator's comments to the Authority within fourteen days of the return of the aircraft to base.

Pilot in command discretion to reduce a rest period

34. 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. The rest period will not be less than ten hours. The exercise of such discretion will be exceptional and shall

not be used to reduced successive rest periods. If the preceding flight duty period was extended, the rest period may be reduced, provided that subsequent allowable flight duty period is also reduced by the same amount.

Reporting exercise of discretion

35. When a pilot in command extends a flight duty period or reduces a rest period it shall be reported to the Chief Pilot on a Captains Voyage Report Form outlining the duty and rest periods.

Days off

36. Wherever possible, days off should be taken in the home environment. A planned rest period may be included as part of the day off.

37. Crew Members shall be granted an average of two days off per week, not counting periods of leave. A minimum of six days off in any consecutive four weeks is permissible, provided the shortfall is made good in the preceding or following four weeks.

Absolute limits on flying hours

38. A person shall not act as a member of the flightcrew of an aircraft if at the beginning of the flight the aggregate of all previous flight times—

(1) During the period of seven consecutive days expiring at the end of the day on which the flight begins exceeds thirty-five hours.

(2) During the period of twenty-eight consecutive days expiring at the end of the day on which the flight begins exceeds one hundred hours; or

(3) During the period of twelve months expiring at the end of the previous month exceeds one thousand hours.

Rules relating to cabin crew

39. The maximum flight duty periods for cabin crew may be one hour longer than those for flightcrew.

40. The maximum flight duty hours for cabin crew shall not exceed—

(1) sixty hours in one week but may be increased to sixty-five hours when a rostered duty covering a series of duty periods, once commenced, is subject to unforeseen delays.

(2) One hundred and five hours in any two consecutive weeks

(3) Two hundred and ten hours in any four consecutive weeks.

Air taxi or sole use charter, including pleasure flying and air ambulance supplement

41. The content of this supplement is designed for use by companies conducting the business of Air Taxi or Sole Use Charter. In the context of this document this type of operation is being carried out when the operator utilises an aircraft which contains nineteen or fewer passenger seats. The maximum duty periods at paragraph 17 will apply as the case may be.

Records to be maintained

42. The monitoring system shall include records for the duty and rest periods of all flying staff as follows:

(a) For each crew member: the beginning, end and duration of each duty and flight duty period, and the function performed during the period; duration of each rest period prior to a flight duty period; dates of days off; weekly totals of duty.

(b) For each flightcrew member: daily and weekly flying hours.

43. Records shall be preserved for at least twelve calendar months. Additionally, copies of all pilot in commands' discretion reports of extended flight duty periods and reduced rest periods will be retained for a period of at least 6 months after the event.

EXAMPLE FLIGHT AND DUTY TIME SCHEME—HELICOPTER OPERATIONS

REST PERIODS, DUTY, AND FLIGHT TIME: HELICOPTERS

Applicability

1. (1) The content of this section is designed for use by those companies holding an Air Operator Certificate, which operate helicopters only. This section is not applicable to those organizations that have a mixed fleet of fixed and rotary wing aircraft.

(2) The scheme has been compiled on the assumption that—

(a) Operations are confined within an area where local time varies by not more than one hour

(b) Use of in-flight relief to obtain an extension to the allowable flight duty period is not exercised

(3) The main body of the scheme is complemented by additions that allow for commercial pleasure flying and air ambulance work. In the context of this annex the following applies:

(a) commercial pleasure flying:

When the helicopter takes off from and lands at the same aerodrome or approved pleasure flying site, without making an intermediate landing, but does not take into account any positioning flight to or from that aerodrome or pleasure flying site.

(b) air ambulance:

When the sole reason for the flight is to carry an ill or injured person to a recognized medical facility, or the carriage of a human organ necessary for the conduct of a transport operation.

(4) It is accepted that a few operations have helicopters based on oil rigs and provide emergency cover. The application of limits placed on allowable flight duty periods in such circumstances is detailed and complex, and not of interest to the wider audience. Therefore, although what is understood by these terms is detailed below, the construction of such schemes will be arranged between the operator and the Authority.

(a) Offshore based and Remote Site Operations—

Those operations in support of the oil/gas industry, where the helicopter and crew are based on a rig or at a remote operating site.

(b) Emergency Flights—

A flight undertaken for the sole purpose of assisting in the resolution of an emergency, which is, or under slightly different circumstances could be, a threat to human life.

Responsibilities

2. (1) The national air operator shall have a scheme for the regulation of flight times of crews. The scheme shall be approved by the Authority and included in the national air operator's Operations Manual. The Operations Manual shall be readily available to every person employed by the national air operator as a member of an aircraft crew.

(2) A crew member shall not fly, and an operator shall not require him to fly, if either has reason to believe that he is suffering or likely to suffer while flying, from such fatigue as may endanger the safety of the aircraft or of its occupants.

(3) Every flightcrew member is required to inform the operator of all flying undertaken so that the cumulative flight and duty times can be assessed against the limitations contained in this section.

(4) The national air operator will publish crew rosters/planned duty sufficiently in advance so that operating crews can 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. Crew members have the responsibility to make optimum use of the opportunities and rest facilities provided. They are responsible for planning and using their rest periods properly in order to minimize the risk of incurring fatigue.

(6) Crew members shall not act as operating crew if they know or suspect that their physical or mental condition renders them unfit to operate.

Definitions

3. For the purpose of this section—

"calendar day" means the period of elapsed time using Co-ordinated Universal Time or local time that begins at midnight and ends twenty-four hours later at the next midnight;

"days off" means periods available for leisure and relaxation free from all duties. A rest period may be included as part of a day off;

"dispatch crew" means a fully qualified and current flightcrew or cabin crew authorized 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;

"flightcrew" means those members of the crew of an aircraft who act as pilot or pilot engineer;

"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;

"flight duty period" means any time during which a person operates in an aircraft as a member of its crew. It starts when the crew member is required by the national air operator to report for a flight and finishes at the end of the flight time on the final sector. This term is used interchangeably with flight duty period and flight duty time;

"minimum rest period" means a period during which a flightcrew member is free from all duties, is not interrupted by the national air operator or private operator, and is provided with an opportunity to obtain not less than eight consecutive hours of sleep in suitable accommodation, time to travel to and from that accommodation and time for personal hygiene and meals;

"positioning" means the practice of transferring crews from place to place as passengers in surface or air transport on behalf of the national air operator. Positioning time counts as duty time;

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

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

"rostered duty" means a 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 the time between an aircraft first moving under its own power until it next comes to rest after landing, on the designated parking position;

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

"standby" means a flightcrew 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;

"reserve duty" means a period during which the national air operator places restraints on a crew member who would otherwise be off duty;

"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

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

Monitoring system

4. (1) Every air operator shall establish a system that monitors the flight time, flight duty time and rest periods of each of its flightcrew members and shall include in its company operations manual the details of that system.

(2) Where a person becomes aware that an assignment by a national air operator to act as a flightcrew member on a flight would result in the maximum flight time or the maximum flight duty time specified in these Regulations being exceeded, the person shall so notify the national air operator.

5. Crew members shall not act as operating crew if they know, or suspect, that their physical or mental condition renders them unfit to operate. Crew members shall not fly if they know that they are or are likely to be, in breach of this section.

Calculation of a flight duty period

6. The maximum flight duty period, in hours and fractions of hours, will be in accordance with paragraph 20. The times extracted may be extended at the pilot in command discretion under the terms of paragraphs 21 and 30 as applicable.

Additional limits on flying—early starts

7. A flightcrew member should normally not be rostered to operate more than three consecutive days where duties start or finish in any part of the period 0001 to 0559 local time. There will be no more than four such duties in seven consecutive days.

8. However, when a crew member is in suitable accommodation provided by the company which is less than sixty minutes travelling time of the reporting point, then 0559 may be changed to 0459 local time.

9. Should any duties be scheduled to be carried out within any part of the period 0200 to 0459 local time, for a maximum of three consecutive nights, then crew members will finish the duty preceding this series by 2100 hours local time before covering the block of consecutive night duties. However, if the preceding duty period extends beyond 2100 hours local time but not later than 2259 hours due to an unforeseen delay the crew member is expected to operate the scheduled flight.

Mixed duties

10. When the crew member is required to report for duty in advance of the stipulated report time for a scheduled flight, to carry out a task at the behest of the national air operator, then the time spent on that task shall be part of the subsequent flight duty period.

Mixed simulator and aircraft flying

11. When a crew member flies in the simulator, either on a check or training, or as an Instructor, and when within the same duty period flies as a flightcrew member on a commercial air transport flight, all the time spent in the simulator is counted in full towards the subsequent flight duty period and the daily flying hour maxima. Simulator flying does not count as a sector, but the flight duty period allowable is calculated from one (1) hour prior to the scheduled simulator start time.

Mixed single pilot/two pilot operations

12. In one duty period, a pilot may fly as single flightcrew up to the point where the total flying and duty hours reach the single flightcrew flight duty period limit. During this time the pilot may fly either in command, or as a co-pilot on a two flightcrew helicopter. The pilot may then continue beyond the single flightcrew flight duty period limit in a two flightcrew operation up to the two flightcrew flight duty period and flying hour maxima, but may only fly as co-pilot.

Positioning and combinations of flying and other DUTY

13. All time spent on positioning as required by the operator shall count as duty but does not count as a sector when calculating the maximum allowable flight duty period. In these circumstances the flight duty period commences at the time at which the crew member reports for the positioning journey.

14. Positioning, any form of ground duty and standby duty at an airport which immediately preceded flight duty, shall be included in the flight duty period and be subject to maximum allowable flight duty period limits specified. Positioning and ground duties immediately following a flight duty shall not be part of the flight duty period, but shall count in computing the length of the subsequent rest period. The time spent between reporting for a flight and the completion of post flight tasks determines the length of the subsequent rest period.

15. If, after the positioning journey, the crew member spends less than a minimum rest period at suitable accommodation provided by the national air operator, and then carries out the flight duty period, the positioning will be counted as a sector if a split duty is claimed when calculating the allowable flight duty period.

Reserve duty—helicopters

16. When at home or in suitable accommodation provided by the national air operator, crew members may be rostered on reserve duty. The time of start, end and the nature of the reserve duty will be defined and notified to crew members. The time a reserve duty starts determines the allowable flight duty period. When the actual flight duty period starts in a more limiting time band, the flight duty period limit will apply. When a crew member is called out from a reserve period 2200 to 0800 hours local time and a crew member is given 2 hours or less notice of report time, then the allowable flight duty period starts at the report time at the designated reporting place.

17. When a crew member is called out from reserve, the reserve duty will cease at the notified start of the flight duty period, when the crew member reports at the designated reporting point.

18. The following limits will apply in respect of reserve or standby and subsequent flight duty period:

Duty	*Maximum Duration*
Standby or Reserve duty	12 hours
Standby or Reserve followed by an FDP	As in cases A and B below

Case A—

If a crew member is called out from standby or reserve to conduct a flight duty period before completing six hours standby or reserve duty, then the total duty period allowed is the sum of the time spent on standby and the flight duty period from paragraph 20.

Case B—

If a crew member is called out from standby or reserve to conduct a flight duty period after completing more than six hours standby or reserve duty, then the total duty allowed is the sum of all the time spent on standby or reserve and the flight duty period, reduced by the amount of standby worked in excess of six hours.

19. When a crew member is required to be on standby at the airport or a helicopter operating site, the flight duty period commences at the reported time.

Maximum flight duty period helicopters

20.

Local Time of Start	Single Pilot		Two Pilots	
	Max. Length of flight duty period (Hours)	Max. Flying Time (Hours)	Max. Length of flighty duty period (Hours)	Max. Flying Time (Hours)
0600–0759	10	7	14	8
0800–1359	11	7	14	8
1400–2159	10	6	14	8
2200–0559	8	5	12	7

Extension of flight duty period by split duty—helicopters

21. (1) When a flight duty period consists of two or more sectors—of which one can be a positioning journey counted as a sector—but separated by less than a minimum rest period, then the flight duty period can be extended by the amounts indicated below—

Consecutive Hours Rest	*Maximum extension of the FDP*
Less than 2	Nil
2 – 10	A period equal to half the consecutive hours rest taken.

Note: *Consecutive hours of rest between two and three hours will only be used once in any single flight duty period.*

(2) The rest period shall not include the time allowed for immediate post and pre-flight duties. When the rest period is 6 hours or less it will suffice if a quiet and comfortable place, not open to the public, is available. Rest cannot be taken in the helicopter. If the rest period is more than 6 consecutive hours, then suitable accommodation will be provided.

Delayed Reporting Time

22. When crew members are informed of a delay before leaving their place of rest the flight duty period shall start at the new reporting time, or three hours after the original reporting time, whichever is the earlier. This paragraph shall not apply if crew members are given ten hours or more notice of a new reporting time.

Rest periods—helicopters

23. (1) Crew members will be notified in good time of flight duty period so that sufficient and uninterrupted pre-flight rest can be obtained. The Company will provide suitable accommodation to crews when away from base to allow opportunities and facilities for adequate pre-flight rest. When flights are carried out at such short notice that it is impracticable for the Company to arrange suitable accommodation, then this responsibility devolves to the aircraft pilot in command.

(2) the minimum rest period which shall be taken before undertaking a flight duty period shall be—

(a) at least as long as the preceding duty period; or

(b) eleven hours,

whichever is the greater.

Note: *The minimum rest period of eleven hours includes travel time to and from the rest facility, hotel check in and out time and time for personal hygiene and meals allowing eight consecutive hours of sleep opportunity in suitable accommodation. If any of the variables are longer than expected, or there is further delay in the crews being afforded the required eight hours sleep opportunity, the minimum rest shall be increased accordingly.*

24. If the preceding duty exceeded sixteen hours, not less than sixteen hours plus two hours for every hour or part of an hour that the previous duty exceeded sixteen hours.

25. Following a sequence of reduced rest and extended flight duty period the subsequent rest period cannot be reduced.

26. At least twenty-four consecutive hours rest each seven days or forty-eight consecutive hours of rest each fourteen days shall be provided. These rest periods may be taken on layovers in suitable accommodation.

27. Following any three consecutive twenty-four hours periods in which there have been three (3) twelve hours or more of flight duty, the flightcrew member shall have twenty-four hour of uninterrupted rest.

28. Following any two consecutive twenty-four hour periods during which there have been two (2) fifteen hours of flight duty the flightcrew shall have thirty hours uninterrupted rest.

29. Crew members who have difficulty in achieving adequate pre-flight rest shall inform the Director, Flight Operations, and then will be given the opportunity to seek medical assistance.

Pilot in command discretion to extend a flight duty period in unforseen circumstances

30. The pilot in command may, at his discretion, and after taking note of the circumstances of other members of the crew, extend a flight duty period in unforeseen circumstances, beyond that permitted in paragraph 19, provided he is satisfied that the flight can be made safely. The extension shall be calculated according to what actually happens, not on what was planned to happen. An extension of two hours is the maximum permitted, except in cases of emergency.

Note: *In respect of an extension to a flight duty, an emergency is a situation which in the judgement of the pilot in command presents a serious risk to the health or safety or crew and passengers, or endangers the lives of others.*

Pilot in command discretion to reduce a rest period

31. 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. The rest period will not be less than ten hours. The exercise of such discretion will be exceptional and shall not be used to reduced successive rest periods. If the preceding flight duty period was extended, the rest period may be reduced, provided that subsequent allowable flight duty period is also reduced by the same amount.

32. Whenever a pilot in command extends a flight duty period, it shall be reported to the national air operator on a Discretion Report Form acceptable to the Director General. If the extension is greater than two hours or when exercised after any reduced rest period, then the operator shall submit the pilot in command's written report together with the operator's comments to the Director General within fourteen days of the aircraft's return to base.

Mixed single/two pilot operations—helicopters

33. In a flight duty period a pilot may fly as a single flightcrew up to the point where the total flight duty hours reaches the single flightcrew limit. During this time the pilot may fly either in command or as a co-pilot on a two flightcrew aircraft. The pilot mat then continue beyond the single flightcrew flight duty period limit in a two flightcrew operation up to the two flightcrew flight duty period and flying hours maxima, but may only fly as a co-pilot.

Repetitive short sectors—helicopters

34. (1) Crews flying repetitive short sectors, for example pleasure flying, off-shore sector shuttles, at a average rate of 10 or more landings per hours, shall have a break of at least 30 minutes away from the helicopter within any continuous period of 3 hours.

(2) When carrying out the more demanding roles of helicopter flying, for example, winching and external load carrying, crews shall have a break of thirty minutes away from the helicopter within any continuous period of 3 hours.

Additional Limits on Flying Early Starts—Helicopters

34. A crew member should not normally operate more than 3 consecutive days where duties start or finish in any part of the period 0001 to 0559 local time. There will be no more than 4 such duties in 7 consecutive days.

Days off—helicopters

35. Wherever possible, days off should be taken in the home environment. A planned rest period may be included as part of the day off. Crew Members shall be granted an average of two days off per week, not counting periods of leave. A minimum of six days off in any consecutive 4 weeks is permissible, provided the shortfall is made good in the preceding or following 4 weeks.

Absolute limits on flying hours

36. A person shall not act as a member of the flightcrew of an aircraft if at the beginning of the flight the aggregate of all previous flight times—

(a) during the period of 7 consecutive days expiring at the end of the day on which the flight begins exceeds thirty-five hours.

(b) during the period of twenty-eight consecutive days expiring at the end of the day on which the flight begins exceeds one hundred hours; or

(c) during the period of 12 months expiring at the end of the previous month exceeds one thousand hours.

Rules relating to cabin crew if carried

37. The maximum flight duty periods for cabin crew may be one hour longer than those for flightcrew.

38. The maximum flight duty hours for cabin crew shall not exceed—

(a) sixty hours in 1 week but may be increased to sixty-five hours when a rostered duty covering a series of duty periods, once commenced, is subject to unforeseen delays;

(b) one hundred and five hours in any 2 consecutive weeks; and

(c) two hundred and ten hours in any 4 consecutive weeks.

Records to be maintained

39. The monitoring system shall include records for the duty and rest periods of all flying staff as follows:

(a) for each crew member: the beginning, end and duration of each duty and flight duty period, and the function performed during the period; duration of each rest period prior to a flight duty period; dates of days off; weekly totals of duty; and

(b) for each flightcrew member: daily and weekly flying hours.

40. Records shall be preserved for at least twelve calendar months. Additionally, copies of all pilot in commands' discretion reports of extended flight duty periods and reduced rest periods will be retained for a period of at least 6 months after the event.

SCHEDULE 11

(Regulation 299)

1. A national air operator shall not authorize an aeroplane to take off and a pilot shall not take off an aeroplane any time conditions are such that frost, ice or snow may reasonably be expected to adhere to the aeroplane unless the pilot has completed all applicable training and unless one of the following requirements is met:

(a) a pre-take-off contamination check, that has been established by the certificate holder and approved by the Authority for the specific aeroplane type, has been completed within 5 minutes prior to beginning take-off. A pre-take-off contamination check is a check to make sure the wings and control surfaces are free of frost, ice, or snow;

(b) the certificate holder has an approved alternative procedure and under that procedure the aeroplane is determined to be free of frost, ice, or snow; and

(c) the certificate holder has an approved deicing and anti-icing programme that complies with this chapter and the take-off complies with that programme.

2. Except for an aeroplane that has ice protection provisions for transport category aeroplane type certification, a pilot shall not fly—

(a) under Instrument Flight Rules into known or forecast light or moderate icing conditions; or

(b) under visual Flight Rules into known light or moderate icing conditions; unless the aircraft has functioning deicing or anti-icing equipment protecting each rotor blade, propeller, windshield, wing, stabilizing or control surface, and each airspeed, altimeter, rate of climb, or flight attitude instrument system.

3. A pilot shall not fly a helicopter under Instrument Flight Rules into known or forecast icing conditions or under visual Flight Rules into known icing conditions unless it has been type certificated and appropriately equipped for operations in icing conditions.

4. Except for an aeroplane that has ice protection provisions for transport category aeroplane type certification, a pilot shall not fly an aircraft into known or forecast severe icing conditions.

5. If current weather reports and briefing information relied upon by the pilot in command indicate that the forecast icing condition that would otherwise prohibit the flight will not be encountered during the flight because of changed weather conditions since the forecast, the restrictions in paragraphs (2), (3), and (4) of this section based on forecast conditions do not apply.

6. A person shall not dispatch or release an aircraft, continue to operate an aircraft en route, or land an aircraft when in the opinion of the pilot in command or flight operations officer, icing conditions are expected or met that might adversely affect the safety of the flight.

7. A person shall not take off an aircraft when frost, ice, or snow is adhering to the wings, control surfaces, propellers, engine inlets, or other critical surfaces of the aircraft or when the take-off would not be in compliance with paragraph (2) of this section. Take-offs with frost under the wing in the area of the fuel tanks may be authorized by the Authority.

8. Except as provided in paragraph (3) of this section, a person shall not dispatch, release, or take off an aircraft any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft, unless the certificate holder has an

approved ground deicing/anti-icing programme in its operations specifications and unless the dispatch, release, and take-off comply with that programme. The approved ground deicing/anti-icing programme shall include at least the following items:

(a) a detailed description of—

(i) how the certificate holder determines that conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft and that ground deicing and anti-icing operational procedures shall be in effect;

(ii) who is responsible for deciding that ground deicing and anti-icing operational procedures shall be in effect;

(iii) the procedures for implementing ground deicing and anti-icing operational procedures;

(iv) the specific duties and responsibilities of each operational position or group responsible for getting the aircraft safely airborne while ground deicing and anti-icing operational procedures are in effect.

(v) initial and annual recurrent ground training and testing for flightcrew members and qualification for all other affected personnel (e.g., flight operations officers, ground crews, contract personnel) concerning the specific requirements of the approved programme and each person's responsibilities and duties under the approved programme, specifically covering the following areas:

(A) the use of holdover times.

(B) aircraft deicing and anti-icing procedures, including inspection and check procedures and responsibilities.

(C) communications procedures;

(D) aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and how contamination adversely affects aircraft performance and flight characteristics;

(E) types and characteristics of deicing and anti-icing fluids.

(F) cold weather preflight inspection procedures;

(G) techniques for recognizing contamination on the aircraft.

9. The certificate holder's holdover timetables and the procedures for the use of these tables by the certificate holder's personnel. Holdover time is the estimated time deicing or anti-icing fluid will prevent the formation of frost or ice and the accumulation of snow on the protected surfaces of an aircraft. Holdover time begins when the final application of deicing or anti-icing fluid commences and expires when the deicing or anti-icing fluid applied to the aircraft loses its effectiveness. The holdover times shall be supported by data acceptable to the Authority. The certificate holder's programme shall include procedures for flightcrew members to increase or decrease the determined holdover time in changing conditions. The programme shall provide that take-off after exceeding any maximum holdover time in the certificate holder's holdover timetable is permitted only when at least one of the following conditions exists:

(a) a pre-take-off contamination check, as defined in paragraph 10 determines that the wings, control surfaces, and other critical surfaces, as defined in the certificate holder's programme, are free of frost, ice, or snow.

(b) it is otherwise determined by an alternate procedure approved by the Authority in accordance with the certificate holder's approved programme that the wings, control surfaces, and other critical surfaces, as defined in the certificate holder's programme, are free of frost, ice, or snow; and

(c) the wings, control surfaces, and other critical surfaces are re-deiced and a new holdover time is determined.

10. Aircraft deicing and anti-icing procedures and responsibilities, pre-take-off check procedures and responsibilities, and pre-take-off contamination check procedures and responsibilities. A pre-take-off check is a check of the aircraft's wings or representative aircraft surfaces for frost, ice, or snow within the aircraft's holdover time. A pre-take-off contamination check is a check to make sure the wings, control surfaces, and other critical surfaces, as defined in the certificate holder's programme, are free of frost, ice, and snow. It shall be conducted within five minutes prior to beginning take off. This check shall be accomplished from outside the aircraft unless the programme specifies otherwise.

11. A certificate holder may continue to operate under this section without a programme as required in paragraph (1)*(c)* of this section, if it includes in its operations specifications a requirement that, any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft, no aircraft will take off unless it has been checked to ensure that the wings, control surfaces, and other critical surfaces are free of frost, ice, and snow. The check shall occur within five minutes prior to beginning take-off. This check shall be accomplished from outside the aircraft

SCHEDULE 12

(Regulation 305)

IMPLEMENTING STANDARDS

The following standards are numbered to correspond numerically with the relevant provisions in the Regulations:

Regulation 8

Inoperative Instruments and equipment under regulation 8 shall meet the following minimum standards:

(a) this implementing standard authorises flight operations with inoperative instruments and equipment installed in situations where no master minimum equipment list is available and no Minimum Equipment List is required for the specific aircraft operation under these regulations.

(b) the inoperative instruments and equipment shall not be—

(i) part of the Visual Flight Rules-day instruments and equipment prescribed in the Act or Regulations made thereunder;

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

(iii) required by the Act or Regulations made thereunder for the specific kind of flight operation being conducted; or

(iv) required to be operational by an airworthiness directive.

(c) to be eligible for these provisions, the inoperative instruments and equipment shall be—

(i) determined by the pilot in command not to be a hazard to safe operation;

(ii) deactivated and placarded "Inoperative"; and

(iii) removed from the aircraft, the flight deck control placarded and the maintenance recorded in accordance with Regulation 8.

(d) the following instruments and equipment may not be included in the Minimum Equipment List:

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

(ii) instruments and equipment required for operable condition by an airworthiness directive, unless the airworthiness directive provides otherwise; and

(iii) instruments and equipment required for specific operations.

Regulation 12

The transport of dangerous goods under regulation 12 shall meet the following minimum standards:

(a) owners and operators desirous of transporting dangerous goods shall be approved by the Authority; and

(b) an applicant shall satisfy the requirements of the International Civil Aviation Organisation Technical Instructions as amended, to be granted the approval.

Regulation 13

The safe transport of dangerous goods under regulation 13 shall meet the following minimum standards:

(a) the Authority shall stipulate the scope of approval after being satisfied that the applicant has complied with the provisions of the International Civil Aviation Organisation Technical Instructions.

(b) notwithstanding, where dangerous goods are to be transported outside the territory of Trinidad and Tobago, the operator shall comply with the appropriate variations noted by contracting states the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 15

The classification of goods as dangerous goods under regulation 15 shall meet the applicable minimum standards of the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 16

The method of packing of goods under regulation 16 shall meet the applicable minimum standards of the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 17

The method and procedures for labelling and marking dangerous goods under regulation 17 shall meet the applicable minimum standards of the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 18

The Dangerous Goods Transport Document under regulation 18 shall meet the minimum standards set out in the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 19

The method of acceptance of dangerous goods under regulation 19 shall meet the minimum standards set out in procedures in the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 20

The inspection for damage, leakage or contamination of dangerous goods under regulation 20 shall meet the minimum standards set out in the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 21

Removal of contamination caused by dangerous goods as a result of damage, leakage or contamination of dangerous goods under regulation 21 shall meet the minimum standards set out in the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 22

Loading restrictions of dangerous goods under regulation 22 shall meet the minimum standards set out in the International Civil Aviation Organisation Technical Instructions as amended.

Regulation 23

The information regarding the transport of dangerous goods which is to be provided to ground staff, passengers, acceptance point personnel, crew members, pilot in command and the relevant civil aviation authorities in the event of an accident or incident, inspection for damage, leakage or contamination of dangerous goods under regulation 23 shall meet the minimum standards set out in the International Civil Aviation Organisation Technical Instructions as amended from time to time.

Regulation 24

Training programmes for initial and recurrent dangerous goods training under regulation 24 shall meet the following minimum standards:

(a) the training programme and training curricula or content of the training programme shall be in accordance with the International Civil Aviation Organisation Technical Instructions as amended;

(b) the training of personnel of an operator approved to carry dangerous goods shall cover the areas identified in Column 1 of Table 1 and be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods and how to identify such goods; and

(c) the training of crew members personnel of a national air operator approved to carry dangerous goods Aircraft, passenger handling staff; and security staff employed by the national air operator who deal with the screening of a passengers and their baggage, have received training which, as a minimum, shall cover the areas identified in Column 2 of Table 1 and be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods, how to identify them and what requirements apply to the carriage of such goods by passengers;

Table 1

Areas of Dangerous Goods Training	1	2
General Philosophy	x	x
Limitations On Dangerous Goods in Air Transport	x	x
Package Marking and Labelling	x	x
Dangerous Goods in Passengers Baggage		x
Emergency Procedures		x

Note: x indicates an area to be covered.

(d) an operator holding a permanent approval to carry dangerous goods shall ensure that—

(i) personnel engaged in the acceptance of dangerous goods have received training and are qualified to carry out their duties. As a minimum, such training shall cover the areas identified in Column 1 of Table 2 and be to a depth sufficient to ensure that staff can make decisions on the acceptance or refusal of dangerous goods offered for carriage by air;

(ii) personnel engaged in ground handling, storage and loading of dangerous goods have received training to enable them to carry out their duties in respect of dangerous goods. At a minimum, this training shall cover the areas identified in Column 2 of Table 2 and be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods, how to identify such goods and how to handle and load them;

(iii) personnel engaged in general cargo handling have received training to enable them to carry out their duties in respect of dangerous goods. As a minimum, this training shall cover the areas identified in Column 3 of Table 2 and be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods, how to identify such goods and how to handle and load them;

(iv) flightcrew members have received training which, as a minimum, shall cover the areas identified in Column 4 of Table 2. Training shall be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods and how they should be carried on an aeroplane; and

(v) passenger handling staff; security staff employed by the operator who deal with the screening of passengers and their baggage; and crew members (other than flightcrew members) have received training which, as a minimum, shall cover the areas identified in Column 5 of Table 2. Training shall be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods and what requirements apply to the carriage of such goods by passengers or, more generally, their carriage on an aeroplane;

(e) a national air operator shall ensure that all personnel who require dangerous goods training receive recurrent training at intervals of not longer than two years;

(f) a national air operator shall ensure that records of dangerous goods training are maintained for all personnel required such training and that these records are maintained at the location where the personnel perform such duties;

(g) a national air operator shall ensure that its handling agent's staff is trained in accordance with the applicable column of Table 1 or Table 2;

Area of Training	1	2	3	4	5
General Philosophy Table 2	x	x	x	x	x
Limitations On Dangerous Goods in the Air Transport	x	x	x	x	x
Classification and List of Dangerous Goods	x	x		x	
General Packing Requirements and Packing Instructions	x				
Packaging Specifications Marking	x				
Package Marking and Labeling	x	x	x	x	x
Documentation from the Shipper	x				
Acceptance of Dangerous Goods, including the use of a checklist	x				
Loading, Restrictions on Loading and Segregation	x	x	x	x	
Inspections for damage or Leakage and Decontamination Procedures	x	x			
Provision of Information to pilot in command	x	x		x	
Dangerous Goods in Passengers' Baggage	x			x	x
Emergency Procedures	x	x		x	x

Note: x indicates an area to be covered.

(h) a national air operator shall provide dangerous goods training manuals which contain adequate procedures and information to assist personnel in identifying packages marked or labeled as containing hazardous materials including—

(i) instructions on the acceptance, handling, and carriage of hazardous materials;

(ii) instructions governing the determination of proper shipping names and hazard classes; and

(iii) packaging, labeling, and marking requirements.

Regulation 25

Dangerous Goods incidents and accidents under regulation 25 shall be reported in accordance with the following minimum standards:

(a) reports of dangerous goods incidents and accidents are to be made to the civil aviation authority of the State in which the incident or accident occurred, and to the Authority by the pilot in command; and

(b) an operator shall also report to the Authority undeclared dangerous goods or inaccurately declared dangerous goods which are discovered in cargo or passengers' baggage. An initial report shall be dispatched within seventy-two hours of the discovery unless exceptional circumstances prevent this.

Regulation 30

1. A change to an Aircraft Maintenance Programme under regulation 30 shall meet the following minimum standards:

2. The Authority shall use information generated from local operators' reliability reports, information from service information letters and service difficulty reports from manufacturers, International Safety Organizations and experiences from the aviation industry worldwide to influence a decision on an operator's approved inspection programme.

Regulation 32

The retention of maintenance records under regulation 32 shall meet the requirements of the Civil Aviation [(No. 3)Air Operators Certification and Administration] Regulations, 2004.

Regulation 33

The transfer of maintenance records under regulation 33 shall meet the requirements of Civil Aviation [(No. 3) Air Operators Certification and Administration] Regulations, 2004.

Regulation 50

The fitness of flightcrew members under regulation 50 shall meet the following minimum standards:

Whenever there is a reasonable basis to believe that a person may not be in compliance with Regulation 50 and upon the request of the Authority, that person shall furnish the Authority or authorize any clinic, doctor, or other person to release to the Authority, the results of each blood test taken for presence of alcohol or narcotic substances up to 8 hours before or immediately after acting or attempting to act as a crew member.

Regulation 52

Flightcrew members at duty stations under regulation 52 shall meet the following minimum standards:

(a) a required flightcrew member shall leave the assigned duty station if he is taking a rest period, and relief is provided—

(i) for the assigned pilot in command during the en-route cruise portion of the flight by a pilot who holds an Airline Transport Pilot Licence and an appropriate type rating, and who is currently qualified as pilot in command or co-pilot, and is qualified as pilot in command of that aircraft during the en-route cruise portion of the flight; and

(ii) in the case of the assigned co-pilot, by a pilot qualified to act as pilot in command or co-pilot of that aircraft during en-route operations.

Regulation 61

The management of fuel in flight under regulation 61 shall meet the following minimum standards:

(a) in-flight fuel checks:

(i) a pilot in command shall ensure that fuel checks are carried out in flight at regular intervals. The remaining fuel shall be recorded and evaluated to—

(A) compare actual consumption with planned consumption;

(B) check that the remaining fuel is sufficient to complete the flight;

(C) determine the expected fuel remaining on arrival at the destination; and

(ii) the relevant fuel data shall be recorded;

(b) in flight fuel management—

(i) if, as a result of an in-flight fuel check, the expected fuel remaining on arrival at the destination is less than the required alternate fuel plus final reserve fuel, the pilot in command shall take into account the traffic and the operational conditions prevailing at the destination aerodrome, along the diversion route to an alternate aerodrome and at the destination alternate aerodrome, when deciding whether to proceed to the destination aerodrome or to divert, so as to land with not less than final reserve fuel; and

(ii) on a flight to an isolated aerodrome the last possible point of diversion to any available en-route alternate aerodrome shall be determined. Before reaching this point, the pilot in command shall assess the fuel expected to remain overhead the isolated aerodrome, the weather conditions, and the traffic and operational conditions prevailing at the isolated aerodrome and at any of the en-route aerodromes before deciding whether to proceed to the isolated aerodrome or to divert to an en-route aerodrome.

Regulation 62

A flightcrew member under regulation 62 during critical phases of flight shall meet the following minimum standards:

(a) duties such as company required calls made for such non-safety related purposes as ordering galley supplies and confirming passenger connections, announcements made to passengers promoting the air operator or pointing out sights of interest, and filling out company payroll and related records are not duties required for the safe operation of the aircraft; and

(b) activities such as eating meals, engaging in non-essential conversations within the cockpit and non-essential communications between the cabin and cockpit crews, and reading publications not related to the proper conduct of the flight are not duties required for the safe operation of the aircraft.

Regulation 66

The reporting of mechanical irregularities under regulation 66 shall comply with the following minimum standards:

(a) a national air operator shall provide an aircraft technical log to be carried on board each aircraft for recording or deferring mechanical irregularities and their correction;

(b) the pilot in command shall enter or have entered in the aircraft technical log each mechanical irregularity that comes to his attention during flight time. Before each flight, the pilot in command shall, where the pilot does not already know, determine the status of each irregularity entered in the technical log at the end of the preceding flight;

(c) a person who takes corrective action or defers action concerning a reported or observed failure or malfunction of an airframe, power plant, propeller, rotor, or personnel and shall include that procedure in the maintenance control manual. appliance, shall record the action taken in the aircraft technical log under the applicable maintenance requirements of the Act or Regulations made thereunder;

(d) a national air operator shall establish a procedure for keeping copies of the aircraft technical log required by this section in the aircraft for access by appropriate representatives of the Authority.

Regulation 77

1. When interference with an aircraft system or equipment is suspected from use of a portable electronic device, crew members of the aircraft shall—

(a) confirm passenger use of such portable electronic device;

(b) instruct the passenger using such portable electronic device to terminate the use of such portable electronic device;

(c) prohibit the use of suspected portable electronic device; and

(d) recheck the affected systems and equipment of the aircraft.

2. The pilot in command shall report incidents of portable electronic device interference to the national air operator and include the following information in the report:

(a) aircraft type, registration, date and Universal Co-ordinated Time of incident, aircraft location using VHF Omni Range bearing and distance or latitude and longitude coordinates, altitude, weather conditions, pilot name and telephone number;

(b) description of effects on cockpit indicators, audio or systems, including radio frequency, identification, duration, severity and other pertinent information;

(c) action taken by the pilot or crew to identify cause or source of interference;

(d) description of device, brand name, model, serial number, mode of operation, device location (seat location), and regulatory approval number;

(e) name and telephone number of passenger operating the device; and

(f) additional information, as determined pertinent by the flightcrew.

Regulation 94

The United States of America, Federal Aviation Administration, Advisory Circular AC120-42, as amended from time to time, meets the minimum International Civil Aviation Organisation requirements for giving effect to the Chicago Convention in respect of the minimum standards relating to regulation 94 which are for Extended Range Operations with two engine-aeroplanes. National air operators may be guided by the current AC120-42 in meeting the Trinidad and Tobago ETOPS requirements.

Regulation 95

The United States of America, Federal Aviation Administration, Circular AC120-42, as amended from time to time, meets the minimum International Civil Aviation Organisation requirements for giving effect to the Chicago Convention in respect of the

minimum standards relating to regulation 95 which are for En-route Alternate Aerodrome –ETOPS operations. National air operators may be guided by the current AC120-42 in meeting the Trinidad and Tobago ETOPS requirements.

Regulation 100

The loading mass and balance of an aircraft under regulation 100 shall meet the following minimum standards:

An operator shall ensure that during any phase of operation, the loading, mass and centre gravity of the aircraft complies with the limitations specified in the approved Aeroplane Flight Manual or the Helicopter Flight Manual, or the Operations Manual where more restrictive.

Regulation 104

The record of emergency and survival equipment carried on board an aircraft under regulation 104 shall meet the following minimum standards:

Where a life raft is required to be carried in accordance with regulation 104, it shall be equipped with an attached survival kit containing at least the following:

(a) a pyrotechnic signalling device;

(b) a life raft repair kit;

(c) a bailing bucket and sponge;

(d) a signalling mirror;

(e) a whistle;

(f) a raft knife;

(g) an inflation pump;

(h) dye marker;

(i) a waterproof flashlight;

(j) a two day supply of water, calculated using the overload capacity of the raft, consisting of one pint of water per day for each person or a means of desalting or distilling salt water sufficient to provide an equivalent amount;

(k) a book on sea survival; and

(l) a first aid kit containing antiseptic swabs, burn dressing compresses, bandages and anti-motion sickness pills.

Regulation 106

The following established international performance codes meet the minimum international civil aviation requirements for giving effect to the Chicago Convention in respect of the minimum standards relating to the performance requirements of these Regulations as applicable:

(a) Federal Aviation Regulations of the United States of America;

(b) Joint Aviation Requirements;

(c) Canadian Aviation Regulations; and

(d) British Civil Authority and Requirement.

Regulation 118

The landing performance limitations for aircraft under regulation 118 shall meet the following minimum standards:

The in-flight determination of the landing distance should be based on the latest available report, preferably not more than thirty minutes before the expected landing time.

Regulation 130

The United States of America, Federal Aviation Administration, Advisory Circular AC120-28 and AC120-29, as amended from time to time, meet the minimum International Civil Aviation Organization requirements for giving effect to the Chicago Convention in respect of the minimum standards relating to regulation 130 which are for the approval of Category II and III operations. National air operators may be guided by the current AC120-28 and AC120-29 in meeting the Category II or Category III requirements.

Regulation 136

Lights other than those specified shall not be displayed if they are likely to be mistaken for the specified lights.

Regulation 189

An operator shall ensure that where alcohol and drugs are used on board an aircraft by passengers under regulation 189 such use shall meet the following minimum standards:

(a) a person shall not drink any alcoholic beverage aboard an aircraft unless the operator has served that beverage to him;

(b) an operator shall not serve any alcoholic beverage to any person aboard any of its aircraft who—

(i) appears to be intoxicated; and

(ii) is escorting a person or being escorted in accordance with security regulations,

(c) an operator shall not allow any person to board any of its aircraft where such person appears to be intoxicated;

(d) an operator shall, within five days after the incident, report to the Authority the refusal of any person to comply with paragraph *(a)*, or of any disturbance caused by a person who appears to be intoxicated aboard any of his aircraft;

(e) except in an emergency, no pilot of a civil aircraft may allow a person who appears to be intoxicated or who demonstrates by manner or physical indications that the individual is under the influence of drugs (except a medical patient under proper care) to be carried in that aircraft.

(f) a crew member shall do the following:

(i) on request of the Authority, submit to a test to indicate the percentage by weight of alcohol in the blood, when—

(A) the Authority is authorized to have the test conducted; and

(B) the Authority is requesting submission to the test to investigate a suspected violation of State law governing the same or substantially similar conduct prohibited regulation 46(5);

(ii) whenever the Authority has a reasonable basis to believe that a person may have violated regulation 46(5), that person shall, upon request by the Authority, furnish the Authority, or authorize any clinic, hospital, doctor, or other person to release to the Authority, the results of each test taken within 4 hours after acting or attempting to act as a crew member that indicates percentage by weight of alcohol in the blood; and

(g) any test information obtained by the Authority under paragraph *(f)* of this section may be evaluated in determining a person's qualifications for any airman certificate or possible violations of the Act or Regulations made thereunder.

Regulation 190

In establishing procedures with respect to the refueling of an aircraft with passengers on board in accordance with regulation 190, an operator shall meet the following minimum standards:

(a) one qualified person shall remain at a specified location during fuelling operations with passengers on board. This qualified person shall be capable of handling emergency procedures concerning fire protection and fire-fighting, handling communications and initiating and directing an evacuation;

(b) crew, staff and passengers shall be warned that refueling or defuelling will take place;

(c) "Fasten Seat Belts" signs shall be off;

(d) "No Smoking" sign shall be on, together with interior lighting to enable emergency exits to be identified;

(e) passengers shall be instructed to unfasten their seat belts and refrain from smoking;

(f) sufficient qualified personnel shall be on board and be prepared for an immediate emergency evacuation;

(g) if the presence of fuel vapour is detected inside the aeroplane, on any other hazard arises during the re/defuelling, fuelling shall be stopped immediately;

(h) the ground area beneath the exits intended for emergency evacuation and slide deployment areas shall be kept clear; and

(i) provision is made for a safe and rapid evacuation.

Regulation 191

An operator shall ensure that passenger seats, safety belts, and shoulder harnesses under regulation 191 shall meet the following minimum standards:

Each sideward facing seat shall comply as follows:

(a) an occupant of a seat that makes more than an 18-degree angle with the vertical plane containing the aircraft centerline shall be protected from head injury by a safety belt and an energy absorbing rest that will support the arms, shoulders, head and spine, or by a safety belt and shoulder harness that will prevent the head from contacting any injurious objects; and

(b) an occupant of any other seat shall be protected from head injury by a safety belt and, as appropriate to the type, location, and angle of facing of each seat, by one or more of the following:

(i) a shoulder harness that will prevent the head from contacting any injurious objects;

(ii) the elimination of any injurious objects within striking radius of the head; and

(iii) an energy absorbing rest that will support the arms, shoulders, head and spine.

Regulation 194

An operator shall ensure that the supply and use of passenger oxygen under regulation 194 meets the following minimum standards:

(a) passenger cabin occupants. When the aeroplane is operating at flight altitudes above 10,000 feet, the following supply of oxygen shall be provided for the use of passenger cabin occupants:

(i) when an aeroplane certificated to operate at flight altitudes up to and including flight level 250, can at any point along the route to be flown, descend safely to a flight altitude of 14,000 feet or less within four minutes, oxygen shall be available at the rate prescribed by this part for a 30-minute period for at least 10 per cent of the passenger cabin occupants;

(ii) when an aeroplane is operated at flight altitudes up to and including flight level 250 and cannot descend safely to a flight altitude of 14,000 feet within four minutes, or when an aeroplane is operated at flight altitudes above flight level 250, oxygen shall be available at the rate prescribed by this part for not less than 10 percent of the passenger cabin occupants for the entire flight after cabin depressurization, at cabin pressure altitudes above 10,000 feet up to and including 14,000 feet and, as applicable, except that there shall be not less than a 10-minute supply for the passenger cabin occupants; and

(iii) for first-aid treatment of occupants who for physiological reasons might require undiluted oxygen following descent from cabin pressure altitudes above flight level 250, a supply of oxygen shall be provided for two percent of the occupants for the entire flight after cabin depressurization at cabin pressure altitudes above 8,000 feet, but in no case to less than one person. An appropriate number of acceptable dispensing units, but in no case less than two, shall be provided, with a means for the cabin crew to use this supply;

(b) passenger briefing. Before flight is conducted above flight level 250, a crew member shall instruct the passengers on the necessity of using oxygen in the event of cabin depressurization and shall point out to them the location and demonstrate the use of the oxygen-dispensing equipment.

Regulation 199

A national air operator shall ensure that where transportation is denied under regulation 199, the procedures for such denial meet the following minimum standards:

(a) a national air operator shall provide the Authority with a copy of each procedure it establishes in accordance with regulation 199; and

(b) whenever the Authority finds that the procedures established by the national air operator under regulation 198 does not meet the requirements prescribed by the Authority for safety, it may advise the national air operator to ensure that all procedures meet the Authority's requirements for safety;

(c) a national air operator shall make available to the public at each airport it serves a copy of each procedure it establishes under regulation 199.

Regulation 200

Exemptions on certain passengers carrying requirements

1. An operator shall ensure that where passengers are carried under regulation 200 that they are carried in accordance with the following minimum standards:

(a) The provisions of regulation 200 apply to the following persons:

(i) a crew member.

(ii) a company employee.

(iii) a Civil Aviation Authority air carrier inspector who is performing official duties.

(iv) a person necessary for the—

(A) safety of the flight;

(B) safe handling of animals;
(C) safe handling of hazardous materials;
(D) security of valuable or confidential cargo;
(E) preservation of fragile or perishable cargo;
(F) Experiments on, or testing of, cargo containers or cargo handling devices;
(G) operation of special equipment for loading or unloading cargo; and
(H) loading or unloading of outsize cargo;

(v) a person described in paragraph *(a)*(iv) of this section, when traveling to or from his assignment;

(vi) a person performing duty as an honor guard accompanying a shipment made by or under the authority of the States;

(vii) a dependant of an employee of the certificate holder when traveling with the employee on company business to or from outlying stations not served by adequate regular passenger flights.

2. A national air operator shall not operate an aeroplane carrying a person covered by paragraph (1) unless—

(a) each person has unobstructed access from his seat to a regular or emergency exit;

(b) the pilot in command has a means of notifying such person when smoking is prohibited and when safety belts shall be fastened; and

(c) the aeroplane has an approved seat with an approved safety belt for such person. The seat shall be located so that the occupant is not in any position to interfere with the flightcrew members performing their duties.

3. Before each take-off, a national air operator operating an aeroplane carrying persons covered by this regulation shall ensure that such person has been orally briefed by the appropriate crew member on—

(a) smoking;

(b) the use of seat belts;

(c) the location and operation of emergency exits;

(d) the use of oxygen and emergency oxygen equipment; and

(e) for extended over-water operations, the location of life rafts, and the location and operation of life vest including a demonstration of the method of donning and inflating a life vest.

4. A national air operator operating an aeroplane carrying persons covered under regulation 200 shall incorporate procedures for the safe carriage of such persons into the certificate holder's operations manual.

Regulation 201

A national air operator shall ensure that where cabin crew are at duty stations under regulation 201 the following minimum standards are met:

(a) when determining cabin crew seating positions, the national air operator shall ensure that they are—

(i) close to a floor level exit;

(ii) provided with a good view of the area of the passenger cabin for which the cabin crew member is responsible; and

(iii) evenly distributed throughout the cabin, in the above order of priority;

(b) nothing in these standards shall be interpreted, where there are more cabin stations than cabin crew, as requiring the number of cabin crew members to be increased.

Regulation 208

A national air operator shall ensure that the procedures to be followed in respect of exit row seating under regulation 208 meets the following minimum standards:

(a) the standards to be utilized in determining whether a cabin crew may seat a person in a passenger exit seat are listed below. A cabin crew will not seat a person in a passenger exit where—

(i) such person lacks sufficient mobility, strength, or dexterity in both arms and hands, and both legs—

(A) to reach upward, sideways, and downward to the location of emergency exit and exit-slide operating mechanisms;

(B) to grasp and push, pull, turn, or otherwise manipulate those mechanisms;

(C) to push, shove, pull, or otherwise open emergency exits;

(D) to lift out, hold, deposit on nearby seats, or manoeuvre over the seatbacks to the next row objects the size and weight of over-wing window exit doors;

(E) to remove obstructions of size and weight similar over-wing exit doors;

(F) to reach the emergency exit expeditiously;

(G) to maintain balance while removing obstructions;

(H) to exit expeditiously;

(I) to stabilize an escape slide after deployment; or

(J) to assist others in getting off an escape slide;

(ii) such person is less than fifteen years of age or lacks the capacity to perform one or more of the applicable functions listed above without the assistance of an adult companion, parent, or other relative;

(iii) the person lacks the ability to read and understand instructions required by this section and related to emergency evacuation provided by the national air operator in printed or graphic form or the ability to understand oral crew commands;

(iv) the person lacks sufficient visual capacity to perform one or more of the above functions without the assistance of visual aids beyond contact lenses or eyeglasses;

(v) the person lacks sufficient aural capacity to hear and understand instructions shouted by cabin crews, without assistance beyond a hearing aid;

(vi) the person lacks the ability adequately to impart information orally to other passengers; or

(vii) the person has a condition or responsibilities, such as caring for small children that might prevent the person from performing one or more of the functions listed above; or a condition that might cause the person harm if he or she performs one or more of the functions listed above.

(b) determination as to the suitability of each person permitted to occupy an exit seat shall be made by the cabin crew or other persons designated in the operations manual of the national air operator;

(c) in the event a cabin crew determines that a passenger assigned to an exit seat would be unable to perform the emergency exit functions, or if a passenger requests a non-exit seat, the cabin crew shall expeditiously relocate the passenger to a non-exit seat;

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

(e) each air operator agent shall, prior to boarding, assign seats consistent with the passenger selection criteria and the emergency exit functions, to the maximum extent feasible;

(f) each air operator ticket agent shall make available for inspection by the public at all passenger loading gates and ticket counters at each aerodrome where it conducts passenger operations, written procedures established for making determinations in regard to exit row seating;

(g) a cabin crew shall include in their passenger briefings a request that a passenger identify himself or herself to allow reseating if he or she—

(i) cannot meet the selection criteria;

(ii) has a non-discernible condition that will prevent him or her from performing the evacuation functions;

(iii) may suffer bodily harm as the result of performing one or more of those functions; or

(iv) does not wish to perform emergency exit functions.

(h) each cabin crew shall include in their passenger briefings a reference to the passenger information cards and the functions to be performed in an emergency exit;

(i) each passenger shall comply with instructions given by a crew member or other authorized employee of the national air operator-implementing exit seating restrictions; and

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

Regulation 210

A national air operator shall ensure where oxygen is available for the medical use of passengers such oxygen and its use meets the following minimum standards:

(a) a national air operator may allow a passenger to use and operate equipment for the storage, generation, or dispensing of oxygen when the following conditions are met:

(i) the equipment is—

(A) furnished by the national air operator;

(B) approved ;

(C) maintained by the certificate holder in accordance with an approved maintenance programme;

(D) free of flammable contaminants on all exterior surfaces;

(E) capable of providing a minimum mass flow of oxygen to the user of four litres per minute;

(F) structured so that all valves, fittings, and gauges are protected from damage; and

(G) appropriately secured;

(ii) when the oxygen is stored in the form of a liquid, the equipment has been under the certificate holder's approved maintenance programme of the national air operator since its purchase new or since the storage container was last purged;

(iii) when the oxygen is stored in the form of a compressed gas—

(A) the equipment has been under the certificate holder's approved maintenance programme since its purchase new or since the last hydrostatic test of the storage cylinder; and

(C) the pressure in any oxygen cylinder does not exceed the rated cylinder pressure;

(iv) each person using the equipment has a medical need to use it evidenced by a written statement to be kept in that person's possession, signed by a licensed physician which specifies the maximum quantity of oxygen needed each hour and the maximum flow rate needed for the pressure altitude corresponding to the pressure in the cabin of the aeroplane under normal operating conditions. This paragraph does not apply to the carriage of oxygen in an aeroplane in which the only passengers carried are persons who may have a medical need for oxygen during flight, no more than one relative or other interested person for each of those persons, and medical attendants;

(v) when a physician's statement is required by paragraph *(a)*(iv), the total quantity of oxygen carried is equal to the maximum quantity of oxygen needed each hour, as specified in the physician's statement, multiplied by the number of hours used to compute the amount of aeroplane fuel required by this part;

(vi) the pilot in command is advised when the equipment is on board, and when it is intended to be used; and

(vii) the equipment is stowed, and each person using the equipment is seated, so as not to restrict access to or use of any required emergency, or regular exit or of the aisle in the passenger compartment;

(b) a person shall not, nor shall a national air operator or its representative allow any person to, smoke within 10 feet of oxygen storage and dispensing equipment carried in accordance with paragraph *(a)*;

(c) a national air operator shall not allow any person to connect or disconnect oxygen dispensing equipment, to or from a gaseous oxygen cylinder while any passenger is aboard the aeroplane; and

(d) the requirements of these paragraphs do not apply to the carriage of supplemental or first aid oxygen and related equipment required by the Act.

Regulation 211

A national air operator shall ensure that where carry-on baggage is allowed on board an aircraft it meets and its allowance on board meets the following minimum standards:

(a) a national air operator shall not allow the boarding of carry-on baggage on an aeroplane unless each passenger's baggage has been scanned to control the size and amount carried on board in accordance with an approved carry-on baggage programme in its operations specifications. In addition, a passenger shall not board an aeroplane where his carry-on baggage exceeds the baggage allowance prescribed in the carry-on baggage programme in the operations specifications of the national air operator;

(b) a national air operator shall not allow all passenger entry doors of an aeroplane to be closed in preparation for taxi or pushback unless at least one required crew member has verified that each article of carry-on baggage is stowed;

(c) a national air operator shall not allow an aeroplane to take off or land unless each article of carry-on baggage is stowed—

(i) in a suitable closet or baggage or cargo stowage compartment placarded for its maximum weight and providing proper restraint for all baggage or cargo stowed within, and in a manner that does not hinder the possible use of any emergency equipment; or

(ii) under a passenger seat;

(d) carry-on baggage, other than articles of loose clothing, shall not be placed in an overhead rack unless that rack is equipped with approved restraining devices or doors;

(e) a national air operator shall ensure that a passenger seat under which carry-on baggage is allowed to be stowed shall be fitted with a means to prevent articles of carry-on baggage stowed under it from sliding forward. In addition, each aisle seat shall be fitted with a means to prevent articles of carry-on baggage stowed under it from sliding sideward into the aisle under crash impacts severe enough to induce the ultimate inertia forces specified in the emergency landing condition regulations under which the aeroplane was type certificated;

(f) in addition to the methods of stowage in paragraph *(c)*, flexible travel canes carried by blind individuals may be stowed—

(i) under any series of connected passenger seats in the same row, where the cane does not protrude into an aisle and where the cane is flat on the floor; or

(ii) between a non-emergency exit window seat and the fuselage, where the cane is flat on the floor; or

(iii) beneath any two non-emergency exit window seats, where the cane is flat on the floor; or

(iv) in accordance with any other method approved by the Authority.

Regulation 212

1. A national air operator shall ensure that where cargo is carried in the passenger compartment of an aircraft its carriage meets the following minimum standards for submission to the Authority for approval:

(a) cargo may be carried anywhere in the passenger compartment where it is carried in an approved cargo bin that meets the following requirements;

(b) the bin shall withstand the load factors and emergency landing conditions applicable to the passenger seats of the aeroplane in which the bin is installed, multiplied by a factor of 1.15, using the combined weight of the bin and the maximum weight of cargo that may be carried in the bin;

(c) the maximum weight of cargo that the bin is approved to carry and any instructions necessary to insure proper weight distribution within the bin shall be conspicuously marked on the bin;

(d) the bin shall not impose any load on the floor or other structure of the aeroplane that exceeds the load limitations of that structure;

(e) the bin shall be attached to the seat tracks or to the floor structure of the aeroplane, and its attachment shall withstand the load factors and emergency landing conditions applicable to the passenger seats of the aeroplane in which the bin is installed, multiplied by either the factor 1.15 or the seat attachment factor specified for the aeroplane, whichever is greater, using the combined weight of the bin and the maximum weight of cargo that may be carried in the bin;

(f) the bin shall not be installed in a position that restricts access to or use of any required emergency exit, or of the aisle in the passenger compartment;

(g) the bin shall be fully enclosed and made of material that is at least flame resistant;

(h) suitable safeguards shall be provided within the bin to prevent the cargo from shifting under emergency landing conditions; and

(i) the bin shall not be installed in a position that obscures any passenger's view of the "seat belt" sign, "no smoking" sign, or any required exit sign, unless an auxiliary sign or other approved means for proper notification of the passenger is provided.

2. Cargo, including carry-on baggage, may be carried anywhere in the passenger compartment of a small aeroplane if it is carried in an approved cargo rack, bin, or compartment installed in or on the aeroplane, if it is secured by an approved means, or if it is carried in accordance with each of the following:

(a) for cargo, it is properly secured by a safety belt or other tie-down having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions, or for carry-on baggage, it is restrained so as to prevent its movement during air turbulence;

(b) it is packaged or covered to avoid possible injury to occupants;

(c) it does not impose any load on seats or in the floor structure that exceeds the load limitation for those components;

(d) it is not located in a position that obstructs the access to, or use of, any required emergency or regular exit, or the use of the aisle between the crew and the passenger compartment, or is located in a position that obscures any passenger's view of the "seat belt" sign, "no smoking" sign or placard, or any required exit sign, unless an auxiliary sign or other approved means for proper notification of the passengers is provided;

(e) it is not carried directly above seated occupants.

(f) it is stowed in compliance with these restrictions during take-off and landing.

(g) for cargo-only operations, if the cargo is loaded so that at least one emergency or regular exit is available to provide all occupants of the aeroplane a means of unobstructed exit from the aeroplane if an emergency occurs.

3. A national air operator shall not carry cargo, including carry-on baggage, in or on any aircraft unless—

(a) it is carried in an approved cargo rack, bin, or compartment installed in or on the aircraft;

(b) it is secured by an approved means; or

(c) it is carried in accordance with each of the following:

(i) for cargo, it is properly secured by a safety belt or other tie-down having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions, or for carry-on baggage, it is restrained so as to prevent its movement during air turbulence;

(ii) it is packaged or covered to avoid possible injury to occupants;

(iii) it does not impose any load on seats or on the floor structure that exceeds the load limitation for those components;

(iv) it is not located in a position that obstructs the access to, or use of, any required emergency or regular exit, or the use of the aisle between the crew and the passenger compartment, or located in a position that obscures any passenger's view of the "seat belt" sign, "no smoking" sign, or any required exit sign, unless an auxiliary sign or other approved means for proper notification of the passengers is provided;

(v) it is not carried directly above seated occupants;

(vi) it is stowed in compliance with this standard for take-off and landing.

(vii) for cargo only operations, paragraph (3)(iv) does not apply where the cargo is loaded so that at least one emergency or regular exit is available to provide all occupants of the aircraft a means of unobstructed exit from the aircraft where an emergency occurs.

4. Each passenger seat under which baggage is stowed shall be fitted with a means to prevent articles of baggage stowed under it from sliding under crash impacts severe enough to induce the ultimate inertia forces specified in the emergency landing condition regulations under which the aircraft was type certificated.

5. When cargo is carried in cargo compartments that are designed to require the physical entry of a crew member to extinguish any fire that may occur during flight, the cargo shall be loaded so as to allow a crew member to effectively reach all parts of the compartment with the contents of a hand fire extinguisher.

Regulation 214

A national air operator shall ensure that passenger briefings under regulation 214 meets the following minimum standards:

(a) a national air operator operating a passenger-carrying aircraft shall ensure that all passengers are orally briefed by the appropriate crew member as follows:

(i) before each take-off, on each of the following:

(A) each passenger shall be briefed on when, where, and under what conditions smoking is prohibited including, but not limited to, any applicable regulations. This briefing shall include a statement that the Civil Aviation Regulations require passenger compliance with the illuminated passenger information signs, posted placards, areas designated for safety purposes as no smoking areas, and crew member instructions with regard to these items. The briefing shall also include a statement that Civil Aviation Regulations prohibits tampering with, disabling, or destroying any smoke detector in an aeroplane lavatory; smoking in lavatories and, when applicable, smoking in passenger compartments;

(B) the location of emergency exits;

(C) the use of safety belts, including instructions on how to fasten and unfasten the safety belts. Each passenger shall be briefed on when, where, and under what conditions the safety belt shall be fastened about that passenger. This briefing shall include a statement that the Civil Aviation Regulations require passenger compliance with lighted passenger information signs and crew member instructions concerning the use of safety belts;

(D) the location and use of any required emergency flotation means;

(E) on operations that do not use a cabin crew, the following additional information:

(I) the placement of seat backs in an upright position before take-off and landing;

(II) location of survival equipment; and

(III) where the flight involves operations above 12,000 MSL, the normal and emergency use of oxygen.

(ii) after each take-off, immediately before or immediately after turning the seat belt sign off, an announcement shall be made that passengers should keep their seat belts fastened, while seated, even when the seat belt sign is off;

(iii) except as provided in paragraph *(a)*(iv) of this standard, before each take-off a required crew member assigned to the flight shall conduct an individual briefing of each person who may need the assistance of another person to move expeditiously to an exit in the event of an emergency. In the briefing the required crew member shall—

(A) brief the person and his attendant, where any, on the routes to each appropriate exit and on the most appropriate time to begin moving to an exit in the event of an emergency; and

(B) inquire of the person and his attendant, where any, as to the most appropriate manner of assisting the person so as to prevent pain and further injury;

(iv) the requirements of paragraph *(a)*(iii) of this standard shall not apply to a person who has been given a briefing before a previous leg of a flight in the same aircraft when the crew members on duty have been advised as to the most appropriate manner of assisting the person so as to prevent pain and further injury; and

(b) a national air operator shall carry on each passenger-carrying aircraft, in convenient locations for use of each passenger, printed cards supplementing the oral briefing and containing—

(i) diagrams of, and methods of operating, the emergency exits;

(ii) other instructions necessary for use of emergency equipment; and

(iii) the certificate holder shall describe in its manual the procedure to be followed in the briefing required by paragraph *(a)* of this standard.

Regulation 215

A national air operator shall ensure that passenger briefings for extended over-water operations under regulation 215 meets the following minimum standards:

(a) a national air operator operating an aeroplane in extended over-water operations shall ensure that all passengers are orally briefed by the appropriate crew member on the location and operation of life vets, life rafts, and other flotation means, including a demonstration of the method of donning and inflating a life vest;

(b) a national air operator shall describe in his manual the procedure to be followed in the briefing required by paragraph *(a)* of this standard;

(c) where the aeroplane proceeds directly over water after take-off, the briefing required by paragraph *(b)* of this standard shall be done before take-off; and

(d) where the aeroplane does not proceed directly over water after take-off, no part of the briefing required by paragraph *(a)* of this standard on has to be given before take-off, but the entire briefing shall be given before reaching the over-water part of the flight.

Regulation 216

A national air operator shall ensure that in using passenger seat belt signs and information signs under regulation 216, the following minimum standards are met:

(a) passenger information signs shall meet the requirements of Civil Aviation [(No. 7) Instruments and Equipment] Regulations, 2004. The signs shall be constructed so that the crew members can turn them on and off;

(b) a person shall not operate an aeroplane on a flight on which smoking is prohibited unless either the "No Smoking" passenger information signs are illuminated during the entire flight, or one or more "No Smoking" placards are posted during the entire flight segment. If both the illuminated signs and the placards are used, the signs shall remain illuminated during the entire flight segment;

(c) there shall be at least one legible sign or placard that reads "Fasten Seat Belt While Seated" which is visible from each passenger seat; and

(d) there shall be installed in each lavatory a sign or placard that prohibits by law any tampering with the smoke detector installed in the lavatory;

Regulation 219

A national air operator shall ensure that the security of items of mass in the passenger compartment under regulation 219, meets the following minimum standards:

A national air operator shall provide and use means to prevent each item of galley equipment and each serving cart, when not in use, and each item of crew baggage, which is carried in a passenger or crew compartment from becoming a hazard by shifting under the appropriate load factors corresponding to the emergency landing conditions under which the aeroplane was type certificated.

Regulation 270

A national air operator shall ensure that where simulator experience is substituted under regulation 270, it meets the following minimum standards:

(a) each aeroplane simulator and other training device that is used in a training course shall—

(i) be specifically approved for—

(A) the certificate holder;

(B) the type aeroplane and, if applicable, the particular variation within type, for which the training or check is being conducted; and

(C) the particular maneuver, procedure, or crew member function involved.

(ii) maintain the performance, functional, and other characteristics that are required for approval;

(iii) be modified to conform with any modification to the aeroplane being simulated that results in changes to performance, functional, or other characteristics required for approval;

(iv) be given a daily functional preflight check before being used;

(v) have a daily discrepancy log kept with each discrepancy entered in that log by the appropriate instructor or check airman at the end of each training or check flight.

(b) a particular aeroplane simulator or other training device may be approved for use by more than one certificate holder;

(c) an aeroplane simulator may be used instead of the aeroplane to satisfy the in-flight requirements of this part, if the simulator—

(i) is approved under this section and meets the appropriate simulator requirements; and

(ii) is used as part of an approved programme that meets the training requirements; and

(d) an aeroplane simulator approved under this section shall be used instead of the aeroplane to satisfy the pilot flight training requirements prescribed in the certificate holder's approved low-altitude windshear flight training programme.

Training courses using aeroplane simulators and other training devices.

1. Training courses utilizing aeroplane simulators and other training devices may be included in the certificate holder's approved training programme for use as provided in this section.

2. A course of training in an aeroplane simulator may be included for use if that course—

(a) provides at least 4 hours of training at the pilot controls of an aeroplane simulator as well as a proper briefing before and after the training;

(b) provides training in at least the procedures and maneuvers set forth in the Act or Regulations made thereunder; or

(c) provides line-oriented training that—

(i) utilizes a complete flightcrew;

(ii) includes at least the maneuvers and procedures (abnormal and emergency) that may be expected in line operations;

(iii) is representative of the flight segment appropriate to the operations being conducted by the certificate holder; and

(d) is given by an instructor who meets the applicable requirements.

Note: The satisfactory completion of the course of training shall be certified by either the Authority or a qualified check airman.

3. The programmed hours of flight training set forth in this subpart do not apply if the training programme for the aeroplane type includes—

(a) a course of pilot training in an aeroplane simulator; or

(b) a course of flight engineer training in an aeroplane simulator or other training device.

4. Each certificate holder required to comply shall use an approved simulator for each aeroplane type in each of its pilot training courses that provides training in at least the procedures and maneuvers set forth in the certificate holder's approved low-altitude windshear flight training programme. The approved low-altitude windshear flight training, if applicable, shall be included in each of the pilot flight training courses.

Regulation 297–298

A national air operator shall ensure that where a flight is released, the notices to airmen under regulation 297 and 298, meets the following minimum standards:

(a) before beginning a flight, the flight operations officer shall provide the pilot in command with all available weather reports and forecasts of weather phenomena that may affect the safety of flight, including adverse weather phenomena, such as clear air turbulence, thunderstorms, and low altitude wind shear, for each route to be flown and each airport to be used; and

(b) during a flight, the flight operations officer shall provide the pilot in command any additional available information of meteorological conditions (including adverse weather phenomena, such as clear air turbulence, thunderstorms, and low altitude wind shear), and irregularities of facilities and services that may affect the safety of the flight.

Regulation 299

A national air operator shall ensure that where a flight is released in icing conditions under regulation 299 its release meets the minimum standard as follows:

A pilot shall not take off an aircraft that has frost, ice, or snow adhering to any rotor blade, propeller, windshield, wing, stabilizing or control surface, to a power plant installation, or to an airspeed, altimeter, rate of climb, or flight attitude instrument system.

Made by the Authority this 19th day of March, 2004.

R. LUTCHMEDIAL
Civil Aviation Authority

Approved by the Minister of Works and Transport.

F. KHAN
Minister of Works and Transport

Laid in the House of Representatives this day of , 2004.

Clerk of the House

Laid in the Senate this day of , 2004.

Clerk of the Senate

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