

Transfer of responsibilities

48.06.5 (1) The Article 83*bis* agreement must specifically mention the functions and duties to be transferred and those functions not mentioned will be considered to remain with the state of registry.

(2) A listing of responsibilities regarding airworthiness that may or may not be transferred between states is contained in Document NAM-CATS-LA 48.

(3) If an Article 83*bis* agreement has been concluded, the state of registry is relieved of responsibility and, where applicable, of liability in respect of the functions and duties duly transferred to the appropriate authority of the state of operator and such authority must apply these regulations.

(4) The Ministry must ensure that relevant information concerning the existence of an Article 83*bis* agreement relating to aircraft operating to or from Namibia's territory is without delay relayed to any Namibian authority involved in the inspection of documents required to be carried on board an aircraft.

(5) For the purpose of identifying the individual states' responsibility for safety oversight when any verification process, such as ramp inspections, a certified true copy of the Article 83*bis* Agreement and of the operating certificate under which the aircraft is operated and in which such responsibility it is listed must be carried on board the aircraft at all times while the Article 83*bis* agreement is in force.

(6) Document NAM-CATS-LA 48 contains examples of suitable Article 83*bis* agreements.

Operations under Article 83 bis

48.06.6 (1) An operator of an aircraft operating under an Article 83*bis* agreement must ensure that a certified copy of such Article 83*bis* agreement summary referred to in regulation 48.06.1 and an english translation where such agreement summary is issued in a language other than english is carried on board such aircraft.

(2) An operator of an aircraft operating under an Article 83*bis* agreement must on request by an authorised officer, inspector or authorised person, make such Article 83*bis* agreement summary available in order to determine which functions and duties have been transferred under such agreement by a state of registry to a state of an operator, when conducting surveillance activities, such as ramp checks.

Substitution of Part 91 of Regulations

4. The Regulations are amended by the substitution for Part 91 of the following Part:

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GENERAL AVIATION AND OPERATING FLIGHT RULES**

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SUBPART 1 GENERAL PROVISIONS

Applicability

- 91.01.1** (1) Subject to the provisions of subregulation (2), this Part applies to –
- (a) aircraft operated within Namibia whether registered in Namibia or in a foreign country;
 - (b) aircraft registered in Namibia and operated internationally;
 - (c) persons acting as crew members of aircraft registered in Namibia;
 - (d) persons who are on board an aircraft operated under this Part; and
 - (e) crew members licensed in terms of these regulations whether operating a Namibian or foreign registered aircraft.
- (2) Additional rules to, and exemptions from, the provisions of this Part are prescribed in respect of –
- (a) the conveyance of dangerous goods in Part 92;
 - (b) operating of powered paragliders and paratrikes in Part 98;
 - (c) operating of gyroplanes in Part 100;
 - (d) operation of remotely piloted aircraft in Part 101;
 - (e) operating of three balloons and airship in Part 102;
 - (f) operating of microlight aircraft in Part 103;
 - (g) operating of microlight aircraft in Part 103;
 - (h) operation of gliders in Part 104;
 - (i) operating of hang gliders paragliders in Part 106;
 - (j) operating of Amateur-built aircraft Part 107;
 - (k) operating of light sport aircraft and non type certified aircraft above 450 kg maximum certified take off mass;

- (l) aeroplanes engaged in commercial air transport operations carrying 20 or more passengers in Part 121;
- (m) helicopters engaged in commercial air transport operations in Part 127;
- (n) helicopters engaged in external-load operations in Part 133;
- (o) aeroplanes engaged in commercial air transport operations carrying 19 or fewer passengers in Part 135;
- (p) Commercial operations of balloons in Part 136; and
- (q) aircraft engaged in aerial work operations in Part 137.

Compliance with laws, regulations and procedures

91.01.2 (1) The pilot-in-command must comply with the laws, regulations and procedures of the states in which operations are conducted.

- (2) The pilot-in-command of an aircraft must –
 - (a) be familiar with the laws, regulations and procedures required for the performance of his or her duties, provided for the areas to be traversed;
 - (b) be familiar with the aerodromes to be used and the air navigation services relating to such aerodromes; and
 - (c) ensure that other members of the flight crew are familiar with the laws, regulations and procedures that are required for the performance of their respective duties in the operation of the aircraft.

(3) Subject to subregulation (4), the pilot-in-command of an aircraft must comply with the regulations contained in this Part unless they conflict with the rules published by a state having jurisdiction over the territory flown over, on condition that if any regulation under this Part is more restrictive and may be followed without violating the rules of that state, such regulation must be complied with.

(4) A pilot-in-command must, in an emergency which endangers or is likely to endanger the safety and security of the aircraft, persons on board such aircraft, or persons or property on the surface, take any action which he or she considers necessary under the circumstances.

(5) If a pilot-in-command deviates from any law, regulation or operational procedure in an emergency referred to in subregulation (4), he or she must without delay notify the appropriate authority of the state within or over the territory over which the deviation occurs.

(6) If the appropriate authority of a state within or over the territory of which the deviation referred to in subregulation (4) occurs, requests the pilot-in-command to submit a report on such deviation, the pilot-in-command must submit the report containing full details of the deviation –

- (a) to such appropriate authority, within the period specified by such appropriate authority; or
- (b) if the deviation occurred in a foreign state, to the Executive Director, within 10 days from the date on which such report is requested by the appropriate authority of such state; and

- (c) if the Executive Director has reason to believe that a foreign operator has or may engage in any act or activity that represents or could represent a safety or security hazard, the Executive Director must immediately notify such foreign air operator.

Specific approvals

91.01.3 (1) A pilot-in-command may not conduct operations for which a specific approval is required unless such approval has been issued by the Executive Director.

(2) The specific approval referred to in subregulation (1) must follow the layout and contain information listed in document NAM-CATS-OPS 91.

Authorisation of personnel to taxi aircraft

91.01.4 An owner or operator of an aircraft may not permit the taxiing of, and a person may not taxi, an aircraft on the movement area of an aerodrome unless the person at the controls of the aeroplane –

- (a) is the holder of a valid pilot license;
- (b) has received instruction in the taxiing of an aircraft from, and has been declared competent to taxi an aircraft by, the holder of a flight instructor rating or, in the case of a foreign registered aeroplane, by a person authorised by an appropriate authority;
- (c) is authorised to use the radio apparatus of the aircraft ; or
- (d) is conversant with the aerodrome layout, routes, signs, markings, lighting, air traffic service signals and instructions, phraseology and procedures, if required, and is able to conform to the standards required for safe aircraft movements at such aerodrome, provided that if radio communication is mandatory such aircraft may not enter the manoeuvring area.

Search and rescue information

91.01.5 A pilot-in-command, an owner or operator of an aircraft must ensure that all essential information concerning the search and rescue services as contemplated in Part 179, in the area over which it is intended that the aircraft will be flown, is available on board the aircraft.

Records of emergency and survival equipment carried

91.01.6 (1) An owner or operator of an aircraft must have available for immediate communication to rescue coordination centres referred to in Part 179, a list containing information regarding the emergency and survival equipment carried on board the aircraft.

- (2) The information referred to in subregulation (1) must include, as applicable –
 - (a) the number, colour and type of life rafts and pyrotechnics;
 - (b) details of emergency medical supplies, water supplies; and
 - (c) the type and frequencies of the emergency portable radio equipment.

Method of carriage of persons

91.01.7 A person may not be in any part of an aircraft, during a flight which is not a part designed for the accommodation of persons, unless temporary permission has been granted by the pilot-in-command to access such part of the aircraft –

- (a) for the purpose of taking action necessary for the safety of such aircraft or of any person, animal or goods on board in such aircraft; or
- (b) in which cargo or stores are carried, except that such part of the aircraft is designed to enable a person to have access to such cargo or stores while such aircraft is in flight.

Admission to flight deck

91.01.8 (1) A person, other than the assigned flight deck crew, may not be carried on the flight deck of a Namibian registered aircraft except with the permission of the pilot-in-command.

(2) The admission of any person to the flight deck must not interfere with the operation of the aircraft.

(3) A person carried on the flight deck must be made familiar with the applicable safety equipment and relevant operational procedures.

Unauthorised carriage

91.01.9 A person may not conceal himself or herself, animals or cargo on board an aircraft.

Portable electronic devices

91.01.10 The pilot-in-command may not permit any person to use a portable electronic device on board an aircraft, including an electronic flight bag, that could adversely affect the performance of the aircraft systems and equipment or the ability of the flight crew member to operate the aircraft.

Endangering safety

91.01.11 A person may not , through any act or omission –

- (a) endanger the safety of an aircraft or any person on board such aircraft; or
- (b) cause or permit an aircraft to endanger the safety of any person or property.

Preservation of documents and records

91.01.12 The owner or operator of an aircraft who is required to retain any of the documents and records for the specified period as contemplated in Subpart 3, must retain such documents for such specified period despite such owner or operator, ceasing to be such owner or operator of such aircraft, before the expiry of such period.

Additional flight crew member equipment

91.01.13 A flight crew member assessed as fit to exercise the privileges of a licence, subject to the use of suitable correcting lenses, must have a spare set of the suitable correcting lenses readily available when exercising those privileges.

Carriage of dangerous goods

91.01.14 An owner or operator of an aircraft may not carry dangerous goods during flight time unless such goods are carried in accordance with the provisions of Part 92.

Passenger intoxication and unruly behaviour

91.01.15 (1) A person may not board an aircraft while under the influence of alcohol or any psychoactive substance such that the safety of the aircraft or its occupants is, or is likely to be, endangered.

(2) A person may not consume alcohol or any psychoactive substance while on board an aircraft if, the effects of such consumption is likely to, endanger the safety of the aircraft or its occupants.

(3) A person may not act in any manner that will, or is likely to, endanger the aircraft or its occupants.

Problematic use of psychoactive substances

91.01.16 (1) Subject to subregulation (2), a person may not, if he or she is, or is likely to be impaired by any psychoactive substance act in the capacity of any crew member, ground support, servicing or maintenance personnel or perform any function or participate in any decision-making process that could affect aviation safety.

(2) If medication that may be considered to be a psychoactive substance has been prescribed by a medical doctor, a person may undertake the duties referred to in subregulation (1) on condition that an aviation medical examiner designated in terms of Part 67 certifies the duties which may be safely accomplished by such person while taking such medication.

(3) A person who has been prescribed medication that may adversely affect performance or is otherwise of the opinion that his or her performance may be impaired through the use of medication or combinations of medication must inform the operator.

**SUBPART 2
CREW****Crew composition and qualifications**

91.02.1 (1) The number and composition of the flight crew may not be less than the number and composition specified in the aircraft flight manual or any other documents associated with the certificate of airworthiness of an aircraft.

(2) In the case of aircraft originally certified with a passenger seating capacity greater than 20 passengers and not involved in commercial air transport operations, the Executive Director may require the inclusion of cabin crew members for the safe operation of the aircraft.

(3) The complement, training and checking requirements of such flight crew and cabin crew members are provided for in Document NAM-CATS-OPS 91.

(4) The pilot-in-command must ensure that each flight crew member and, if applicable, each cabin crew member –

- (a) has maintained competency and is qualified to perform the duties assigned to him or her;
- (b) holds the appropriate valid crew licences, ratings and certificates;
- (c) has the ability to speak and understand the language used for aeronautical radiotelephony communications for the routes being flown; and
- (d) has been appropriately trained to competency in the use of airborne collision avoidance system (ACAS II) equipment and the avoidance of collision if the aeroplane is equipped with an airborne collision avoidance system (ACAS II).

(4) In the case of a multi-pilot crew, the owner or operator of an aircraft must designate one pilot among the flight crew as pilot-in-command of the aircraft and the pilot-in-command may delegate the conduct of the flight to another suitably qualified pilot.

(5) The owner or operator of an aircraft must ensure that each flight and cabin crew member meets the requirements of subregulation (3).

(6) If the Executive Director has determined the need for cabin crew members as contemplated in subregulation (2), the owner or operator of that aircraft must –

- (a) ensure each cabin crew member is seated and secured in the seat provided for under regulation 91.07.18(4) during take-off, landing or as otherwise directed by the pilot-in-command; and
- (b) ensure that each cabin crew member receives training prior to his or her first flight in that aircraft and annual recurrent training thereafter.

Crew member emergency duties

91.02.2 (1) The owner or operator of an aircraft and, where appropriate, the pilot-in-command of a multi-crew aircraft must assign to each crew member concerned, the necessary functions to be performed in an emergency or in a situation requiring emergency evacuation.

- (2) The functions referred to in subregulation (1) must –
 - (a) ensure that any reasonably anticipated emergency can be adequately dealt with; and
 - (b) take into consideration the possible incapacitation of individual crew members.

Crew member responsibilities

91.02.3 (1) A person may not act as a crew member of an aircraft –

- (a) while using any psychoactive substance which may affect his or her faculties in any manner that may jeopardise safety;
- (b) within 24 hours following scuba diving by such flight crew member;
- (c) within 48 hours following blood donation by such flight crew member;

- (d) if the crew member knows or suspects that he or she is suffering from or, having due regard to the circumstances of the flight to be undertaken, is likely to suffer from fatigue to such an extent that it may endanger the safety of the aircraft or its occupants; or
 - (e) if the crew member is in any doubt of being able to accomplish his or her assigned duties on board the aircraft.
- (2) A crew member may not –
- (a) consume alcohol less than eight hours prior to commencing standby for operational duty or commencing operational duty, which operational duty is considered to have commenced at the specified reporting time;
 - (b) commence an operational duty period while the concentration of alcohol in his or her blood, is more than 0,04 gram per 100 millilitres; or
 - (c) consume alcohol during flight duty or while on standby duty, or within eight hours after an accident or reportable incident involving the aircraft, unless the accident or incident was not related to his or her duties.
- (3) A person may not act as a flight crew member of an aircraft if, prior to each flight, the expected flight time exceeds, or is likely to exceed, the permissible aggregate –
- (a) for all flying which are –
 - (i) 100 hours, during the preceding 30 days; or
 - (ii) 1000 hours, during the preceding 12 months,
- unless otherwise specified in an approved flight and duty scheme;
- (b) in the case of flight instructors conducting ab initio or any training towards an initial rating or licence, six hours within one day, except that, for the purposes of computing flight time in meeting the limitation referred to in paragraph (a)(i), each flight hour spent in such training is considered to be one and one-half (1½) hours flight time as part of a multi-pilot crew for a flight to be undertaken wholly or partly under IFR, 100 hours during the preceding 30 days;
 - (c) 100 hours during the preceding 30 days flying as the sole pilot of an aircraft for a flight to be undertaken wholly or partly under IFR.
- (4) A person may not act as a cabin crew member of an aircraft for which the Executive Director has determined the need for cabin crew members, as provided for in regulation 91.02.1 (2), if prior to each flight the expected flight time exceeds, or is likely to exceed, the permissible aggregate of –
- (a) 300 hours, during the preceding 90 days; or
 - (b) 1000 hours, during the preceding 12 months,

unless otherwise specified in an approved flight and duty scheme.

Recency

91.02.4 (1) A pilot may not act as pilot-in-command or second-in-command of an aircraft required to be crewed by more than one pilot, carrying passengers by day, unless if –

- (a) such pilot has personally, within the 90 days immediately preceding the flight, carried out either by day or by night at least three take-offs and three landings in the same class or, if a type-rating is required, type or variant of such aircraft ; or
- (b) in the case of a helicopter such pilot has personally carried out three circuits including three take-offs and three landings in the same type of helicopter as that in which such flight is to be undertaken.

(2) The landings required under subregulation (1) may be completed in a flight simulation training device approved for that purpose for a multi-engine aircraft and in the case of a tail-wheel aircraft, each landing must be carried out to a full stop.

(3) If the take-off and landing requirements referred to in subregulation (1) have been satisfied in a multi-engine aircraft, the requirement is considered to have been met in respect of single-engine aircraft as well.

(4) A pilot may not act as pilot-in-command or second-in-command of an aircraft on an instrument approach to an aerodrome in instrument meteorological conditions unless the pilot has, within the 90 days immediately preceding such approach procedure or procedures established by the Executive Director or an appropriate authority –

- (a) executed at least two approaches in an aircraft or a flight simulation training device approved for that purpose or a combination of aircraft and flight simulation training device approved for that purpose, either under actual or simulated conditions, with reference to flight instruments only; or
- (b) undergone the appropriate skill test as provided for in Part 61.

Crew members at duty stations

91.02.5 (1) Each required flight crew member must remain at the assigned duty station during take-off and landing and during critical phases of a flight.

(2) Each flight crew member must remain at his or her station during all phases of a flight unless if –

- (a) the absence of such flight crew member is necessary for the performance of his or her duties in connection with the operation;
- (b) the absence of such flight crew member is necessary for physiological needs, provided one qualified pilot remains at the controls at all times; or
- (c) the flight crew member is taking a rest period, and a qualified relief crew member replaces him or her at the duty station.

(3) An assigned pilot-in-command must remain at his or her duty station during all phases of a flight except if during enroute cruise portion of the flight such pilot-in-Command is taking a rest period, he or she is replaced by a pilot who –

- (a) holds an appropriate type rating;
- (b) is currently qualified as a pilot-in-command or co-pilot; and
- (c) is qualified as a pilot-in-command of that aircraft during the enroute cruise portion of the flight.

(4) An assigned co-pilot must remain at his or her duty station during flight except if during the enroute cruise portion of the flight such co-pilot is taking a rest period and he or she is replaced by a pilot who is qualified to act as a pilot-in-command or co-pilot of that aircraft during the enroute operations.

(5) In the case of a single-pilot aircraft, the pilot-in-command must, during all phases of the flight, remain at the controls of the aircraft.

Duties of pilot-in-command regarding flight preparation

91.02.6 (1) The pilot-in-command of an aircraft may not commence a flight unless he or she is satisfied that –

- (a) the aircraft is airworthy, duly registered and that the appropriate certificates with respect to such aircraft are aboard that aircraft ;
- (b) the instruments and navigation, communication and other equipment required for the particular type of operation to be undertaken are installed and are serviceable and functioning correctly, except as provided for in the MEL, if any;
- (c) the mass of the aircraft at any time does not exceed the maximum certificated take-off mass calculated from the performance information provided in the aircraft flight manual referred to in regulation 91.03.2, in terms of which the operating limitations referred to in Subpart 8 are complied with;
- (d) the load carried by the aircraft is safely secured, fit to be conveyed in accordance with Part 92 and is distributed in a manner that the centre of gravity is within the limits provided for in the aircraft flight manual referred to in regulation 91.03.2;
- (e) aircraft operating limitations contained in the flight manual or its equivalent will not be exceeded;
- (f) if a ATS flight plan is required in terms of regulation 91.06.23, such ATS flight plan, has been properly completed and filed with the appropriate air traffic service unit ;
- (g) all the documents and forms required to be carried on board are carried as specified in regulation 91.03.1;
- (h) a check has been completed indicating that the operating limitations referred to in Subpart 8 will not be exceeded;
- (i) the search and rescue information, referred to in regulation 91.01.5, is available on board;
- (j) the requirements in respect of fuel, oil, oxygen, weather, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes for the route being flown and any likely alternatives, whether flown under instrument or VFR, are complied with;

- (k) the aerodrome operating minima are not less than the operating minima of the aerodrome being operated to or from, established by the appropriate authority of the state in which the aerodrome is located, unless such appropriate authority approves lower aerodrome operating minima;
- (l) current and suitable IFR or VFR, as applicable, charts and related publications required to –
 - (i) depart the place of origin;
 - (ii) operate on the route to the destination or other route that a flight could reasonably be expected to be diverted to; and
 - (iii) arrive at the place of destination or any other alternate destination, are carried on board;
- (m) the external surfaces are checked prior to take-off for any deposit which might adversely affect the performance or controllability of the aircraft, unless otherwise permitted in the aircraft flight manual referred to in regulation 91.03.2, and if such deposit is found, ensure that it is removed;
- (n) according to the information available to him or her-
 - (i) in respect of an aircraft, the condition of the runway intended to be used will not prevent a safe take-off at departure or a safe landing at the destination aerodrome or alternate aerodrome, as applicable; and
 - (ii) the weather at the departure and arrival aerodromes and en route, including any possible alternate aerodromes or routes, will not preclude safe completion of the flight;
- (o) the runway visual range or visibility in the take-off direction of the aircraft is equal to, or better than, the applicable minimum;
- (p) the flight crew members are properly qualified for the specific operation to be undertaken, except that for commercial air operations, the operator must ensure that the flight crew are properly qualified;
- (q) an adequate and suitable aerodrome is available for take-off, enroute and destination, should it become inadvisable to continue to or land at the destination aerodrome; and
- (2) The pilot-in-command of an aircraft must –
 - (a) not commence a flight unless he or she has ascertained through the relevant NOTAM, AIC, IAIP or IAIP Supplement that the aerodromes, navigation aids and communication facilities are adequate for the manner in which the flight is to be conducted;
 - (b) prior to take-off from an aerodrome at which an air traffic service unit is in operation, determine through the aeronautical information services available from the unit or any other reliable source, that the unserviceability of any aerodrome, navigation aids or communication facilities required for such flight, will not prejudice the safe conduct of the flight;
 - (c) advise an air traffic service unit, as soon as it is practical to do so, of any inadequate facilities encountered during operations; and

- (d) decide on the adequacy of facilities and services available at an aerodrome of intended operation, when assessing the level of safety risk associated with the aircraft type and nature of the operation, in relation to the availability of rescue and firefighting services.

(3) If a load and trim sheet is required in terms of these regulations, the load and trim sheet must be acceptable to and countersigned by the pilot-in-command before a flight commences, but if the load and trim sheet is submitted to the pilot-in-command by electronic data transfer, commencement of the flight is considered to be the acceptance of the load and trim sheet by such pilot-in-command.

Duties of pilot-in-command regarding flight operations

91.02.7 (1) The pilot-in-command of an aircraft is, whether manipulating the controls or not, responsible for –

- (a) the operation, safety and security of the aircraft, crew members, passengers and cargo in accordance with these regulations while he or she is in command;
- (b) operational control of the aircraft;
- (c) the conduct of crew members and passengers carried on such aircraft ; and
- (d) the maintenance of discipline by all persons on board the aircraft .

(2) The pilot-in-command of the aircraft has the authority –

- (a) to give such commands as he or she deems necessary in the interest of the safety of the aircraft, persons or property on board the aircraft; and
- (b) to disembark any person or cargo which in his or her opinion, represents a potential hazard to the safety of the aircraft, persons or property on board the aircraft.

(3) The pilot-in-command of the aircraft must ensure that all passengers are informed as to –

- (a) when and how oxygen equipment is to be used, if the carriage of oxygen is required;
- (b) the location and use of life jackets or equivalent individual flotation devices, where the carriage of life jackets is required;
- (c) the location and method of opening emergency exits;
- (d) when seat belts are to be fastened;
- (e) when smoking is prohibited;
- (f) when portable electronic devices may be used;
- (g) the existence and location of the passenger safety features card, if carried on board; and
- (h) before take-off, the location and general manner of use of the relevant emergency equipment carried for collective use and, when an emergency arises, instruct the passengers to take such emergency action as may be appropriate.

- (4) A pilot-in-command of an aircraft must –
 - (a) ensure that a pre-flight inspection is carried out, and that the checklists, and where applicable, the flight deck procedures and other instructions regarding the operation of the aircraft, the limitations contained in an aircraft flight manual referred to in regulation 91.03.2 or equivalent certification document, are fully complied with at the appropriate times during a flight;
 - (b) decide whether or not to accept an aircraft with unserviceability allowed by Configuration Deviation List or MEL, where applicable;
 - (c) determine that aircraft performance will permit the take-off and departure to be carried out safely;
 - (d) ensure that, before take-off and landing and whenever, by reason of turbulence, any emergency occurring during a flight or whenever considered necessary in the interest of aviation safety the precaution is considered necessary –
 - (i) all persons on board aircraft are secured in their seats by means of the seat belts or shoulder harnesses provided; and
 - (ii) equipment and baggage are properly secured and all exit and escape paths are unobstructed;
 - (e) when re-planning, while in flight, to proceed along a route or to a destination other than a route or destination originally planned, amend an operational flight plan, if such a plan was required in terms of regulation 91.02.6(1)(f), and notify a nearest air traffic service unit of such change;
 - (f) not continue towards an aerodrome of intended landing unless the latest available information indicates that at the expected time of arrival, a landing can be effected at that aerodrome or at least one destination alternate aerodrome, in compliance with the operating minima established in accordance with regulation 91.07.5;
 - (g) report any accident or incident involving an aircraft in accordance with regulations related to aircraft accident and incident investigation, unless the pilot-in-command is incapacitated or an operator has established another means of reporting accidents or incidents, in which case the operator must initiate the report;
 - (h) report any dangerous goods accident or incident involving an aircraft in accordance with Part 92;
 - (i) if an aircraft is endangered in flight by a near collision with any other aircraft or object, faulty air traffic procedure or lack of compliance with applicable procedures by an air traffic service unit or a flight crew member or a failure of ATS facilities, submit an ATS incident report;
 - (j) record any technical defect and that he or she has exceeded any technical limitation;
 - (k) if a potentially hazardous condition such as bird accumulation, an irregularity in a ground or navigation facility, meteorological phenomena, a volcanic ash cloud or a greater than normal radiation level is observed during flight, notify an air traffic service unit as soon as possible.
 - (l) If an ELT has been inadvertently activated as a result of a hard landing or for other reasons the pilot-in-Command must –

- (i) immediately report such inadvertent activation of an ELT to a rescue co-ordination centre, through a nearest air traffic service unit ; and
- (ii) record such inadvertent activation of an ELT in an appropriate flight log as maintenance may be required before it is returned to service;
- (m) report any occurrence of height keeping errors encountered in an RVSM environment, as provided for in Document NAM-CATS-OPS 91; and
- (n) report a runway braking action through an air-report when a runway braking action encountered is not as good as reported.
- (5) The pilot-in-command of an aircraft must ensure that –
 - (a) breathing oxygen is available to crew members and at least ten percent of the passengers if flights in a non-pressurised aircraft are contemplated above 10 000 feet, and up to 12 000 feet for more than 120 minutes intended flight time, above 12 000 feet; and
 - (b) breathing oxygen is carried in sufficient quantities for all flights at such altitudes where a lack of oxygen might result in impairment of faculties of crew members or harmfully affect passengers.
- (6) The pilot-in-command of an aircraft may not –
 - (a) require a crew member to perform any duties during a critical phase of the flight, except those duties required for the safe operation of the aircraft;
 - (b) permit any activity during a critical phase of the flight which could distract any crew member from the performance of his or her duties or which could interfere in any way with the proper conduct of those duties; and
 - (c) commence a flight in the event a crew member is incapacitated by any cause such as injury, fatigue, sickness or the effects of any psychoactive substance or continue a flight beyond the nearest suitable aerodrome in the event of a flight crew member becoming unable to perform any essential duties as a result of fatigue, sickness or lack of oxygen.

SUBPART 3 DOCUMENTATION AND RECORDS

Documents to be carried on board

91.03.1 (1) An owner or operator of an aircraft must ensure that the following documents, or certified true copies of such documents, are carried on board an aircraft on each individual flight –

- (a) if the aircraft is engaged in an international flight –
 - (i) the certificate of registration;
 - (ii) the certificate of airworthiness or, for non-type certificated aircraft, an authority to fly;
 - (iii) an appropriate licence and medical certificate of each crew member;

- (iv) a general declaration;
- (v) an aircraft radio station licence;
- (vi) a passenger manifest, unless if such information is included in a general declaration referred to in subparagraph (iv);
- (vii) if cargo is carried, a manifest and detailed declaration of cargo;
- (viii) a certificate of release to service;
- (ix) a navigation log or operational flight plan;
- (x) an aircraft flight manual, referred to in regulation 91.03.2 or an equivalent document, which document must include the statements referred to in Document NAM-CATS-OPS 91, if flight in RVSM airspace is contemplated;
- (xi) mass and balance report;
- (xii) flight folio or journey log or equivalent;
- (xiii) MEL, if applicable;
- (xiv) noise certificate, if such certificate has been issued for the type of aircraft;
- (xv) a list of visual signals and procedures for use by intercepting and intercepted aircraft;
- (xvi) list of specific approvals, if applicable; and
- (xvii) where applicable, a special flight permit;
- (b) if the aircraft is engaged in a domestic flight –
 - (i) the certificate of registration;
 - (ii) the certificate of airworthiness or, for non-type certificated aircraft, an authority to fly;
 - (iii) the appropriate licence and medical certificate of each crew member;
 - (iv) the aircraft radio station license;
 - (v) the certificate of release to service;
 - (vi) aircraft flight manual referred to in regulation 91.03.2 or an equivalent document;
 - (vii) the mass and balance report;
 - (viii) the flight folio or journey log or equivalent;
 - (ix) MEL, if applicable;
 - (x) noise certificate, if such certificate has been issued for the type of aircraft;

- (xi) list of visual signals and procedures for use by intercepting and intercepted aircraft;
- (xii) list of specific approvals, if applicable;
- (xiii) licence to operate the service, if required; and
- (xiv) where applicable, a special flight permit.

Aircraft flight manual

91.03.2 (1) The owner or operator of an aircraft must keep an approved aircraft flight manual for each aircraft of which he or she is the owner or operator and must keep such manual updated with the latest amendments and implement changes issued by an appropriate authority.

(2) The flight crew members of the aircraft must, on each flight, operate such aircraft in accordance with the aircraft flight manual, unless an unforeseen emergency dictates otherwise.

Aircraft checklist

91.03.3 (1) The owner or operator of an aircraft must establish and make available to the flight crew and other personnel in his or her employ needing the information, a checklist system for the aircraft, to be used by such flight crew and other personnel for all phases of the operation under normal, abnormal and emergency conditions.

(2) The pilot-in-command must ensure the checklists used on board the aircraft are complied with and utilised having due regard to human factors principles.

(3) The checklists required in terms of subregulation (1) must be designed having due regard to human factors principles as provided for in Document NAM-CATS-OPS 91.

Flight folio or Journey log

91.03.4 (1) The owner or operator of a Namibian registered aircraft must ensure that the aircraft carries a flight folio, journey log or any other similar document.

(2) The flight folio or journey log must contain the following items –

- (a) the aeroplane nationality and registration;
- (b) a date of the flight;
- (c) the crew member names and duty assignments;
- (d) the departure and arrival points and times;
- (e) the purpose of the flight;
- (f) observations regarding the flight; and
- (g) the signature of the pilot-in-command.

(3) The pilot-in-command is responsible for the journey log book.

Flight recorder records

91.03.5 (1) The owner or operator of an aircraft on which a flight recorder is carried must –

- (a) in the case of an accident or incident involving such aircraft, preserve the original recording, as retained by the flight recorder for a period of not less than 60 days calculated from the date of the accident or incident occurred or until permission for disposal of such recording has been given by the investigator-in-charge or an appropriate authority, whichever is the latter date; and
- (b) if the Executive Director directs such owner or operator, preserve the original recording, as retained by the flight recorder, for a specified period calculated from the date of such direction.

(2) If an aircraft is required under this Part to be fitted with a flight data recorder, the owner or operator of the aircraft must –

- (a) have the recording from a flight recorder for the period of operating time as required by subregulation (1)(a) and (b), but for the purpose of testing and maintaining a flight data recorder one hour of the oldest recorded material at the time of testing may be erased;
- (a) keep a recording from a flight recorder of at least one representative flight made within the preceding 12 months which includes a take-off, climb, cruise, descent, approach and landing, together with a means of identifying the recording with the flight to which it relates; and
- (c) keep a document which represents the information necessary to retrieve and convert the stored data into engineering units.

(3) The owner or operator of an aircraft on which a flight recorder is carried must, within a reasonable time after being requested to do so by the Executive Director or an appropriate authority, produce any recording made by such flight recorder which is available or has been preserved.

(4) A cockpit voice recorder recording may be used for other purposes other than for the investigation of an accident or incident, only with the consent of all the flight crew members concerned.

(5) The flight data recorders recordings may be used for other purposes other than the investigation of an accident or incident which is subject to mandatory reporting, only when such recordings are –

- (a) used by the owner or operator only for airworthiness or maintenance purposes;
- (b) de-identified; or
- (c) disclosed under secure procedures.

Logbooks

91.03.6 (1) The owner or operator of an aircraft must in respect of Namibian registered aircraft keep a logbook for specified equipment for the purpose of recording in such log book the maintenance history of the equipment to which each relates –

- (a) the aircraft logbook for each aircraft;

- (b) the engine logbook for each aircraft engine; and
- (c) a propeller logbook for each propeller.

(2) An aircraft which does not qualify for the issue of a certificate of airworthiness is exempted from complying with the requirement referred to subregulation (1).

(3) A logbook kept in terms of subregulation (1) must conform to the format provided from time to time in an Aeronautical Information Circular by the Executive Director.

Operations manual

91.03.7 (1) For operations requiring an approval from the Executive Director, an operator must prepare an operations manual containing all the information required under this Part set out the manner in which he or she may operate.

(2) An operator must provide for the use and guidance of personnel concerned, the operations manual containing all the instructions and information necessary for the operations personnel to perform their duties;

(3) The operations manual referred to in subregulation (2) must be amended or revised when necessary to ensure that the information contained in such manual is kept up to date and all such amendments or revisions must be issued to all personnel that are required to use the manual.

SUBPART 4 INSTRUMENTS AND EQUIPMENT

Use and installation of instruments and equipment

91.04.1 (1) The instruments, equipment and flight documents provided for in this Subpart must, in addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, be installed or carried, as appropriate, in an aircraft according to the aircraft used and to the circumstances under which the flight is to be conducted.

(2) The instruments and equipment, including their installation, must as contemplated in subregulation (1) be acceptable to the Executive Director.

(3) The instruments and equipment of the aircraft intended to be used, must comply with the minimum requirements for the planned operation, that will enable the flight crew to –

- (a) control the flight path of the aircraft;
- (b) carry out any required procedural manoeuvres; and
- (c) observe the operating limitations of the aircraft in the expected operating conditions.

(4) The instruments on an aircraft which are used by a pilot must be arranged in such a manner that the pilot can see their indications readily from his or her station, with the minimum practicable deviation from the position and line of vision which he or she normally assumes when looking forward along the flight path.

(5) If a single instrument or item of equipment in an aircraft is required to be operated by more than one pilot, such single instrument or item of equipment must be installed in such a manner that it can be readily seen and operated from each pilot station.

(6) An aircraft must be equipped with the means for indicating the adequacy of the power being supplied to the required flight instruments.

(7) The placards and instrument markings, containing those operating limitations required by the type certificate or by these regulations must be displayed in the aircraft and be visible to the flight crew.

(8) An owner or operator of an aircraft must ensure that a flight does not commence unless the instruments and equipment required under these regulations are functioning and are in a condition for safe operation of the kind of operation being conducted, except as provided for in a MEL.

(9) The owner or operator of an aircraft is not required to obtain approval for –

- (a) fuses referred to in regulation 91.04.2;
- (b) an independent portable electric light referred to in regulation 91.04.3(1)(d);
- (c) the accurate time piece referred to in regulations 91.04.4 and 91.04.5;
- (d) first aid equipment referred to in regulation 91.04.16;
- (e) megaphones referred to in regulation 91.04.21; and
- (f) survival equipment referred to in regulation 91.04.25.

(10) An aircraft with advanced cockpit automation systems (glass cockpits) must have system redundancy that provides the flight crew with attitude, heading, airspeed and altitude indications in case of failure of the primary system or display.

(11) An aircraft must be equipped with or carry on board –

- (a) an accessible first-aid kit;
- (b) portable fire extinguishers of a type which, when discharged, will not cause dangerous contamination of the air within the aircraft and at least one portable fire extinguisher must be located in –
 - (i) the pilot's compartment; and
 - (ii) each passenger compartment that is separate from the pilot's compartment and that is not readily accessible to the flight crew;
- (c) a seat or berth –
 - (i) for each person over the age of two years; and
 - (ii) a seat belt for each seat and restraining belts for each berth.

(12) An aircraft on all flights must be equipped with the ground-air signal codes for search and rescue purposes.

(13) An aircraft on all flights must be equipped with a safety harness for each flight crew member seat.

Circuit protection devices

91.04.2 (1) An owner or operator of an aircraft in which fuses are used, may not operate an aircraft unless there are spare fuses available for use in flight equal to at least ten percent or three, whichever is the greater, of the number of fuses of each rating required for complete circuit protection, which spare fuses must be accessible to the flight crew during flight.

(2) If the ability to reset a circuit breaker or replace a fuse is essential to safety in flight, such circuit breaker or fuse must be located and identified in such a manner that it can be readily reset or replaced in flight.

(3) A person may not deactivate a circuit breaker in flight other than in accordance with the aircraft flight manual referred to in regulation 91.03.2.

Aircraft operating lights

91.04.3 (1) A owner or operator of an aircraft may not operate such aircraft by night, unless, in addition to the equipment specified in regulation 91.04.4 or 91.04.5(1), the aircraft is equipped with –

- (a) serviceable navigation lights;
- (b) a serviceable landing light;
- (c) a serviceable rotating beacon or strobe light; and
- (d) an independent portable light for each required crew member, readily accessible to such crew member when seated at his or her designated station.

(2) The power supplied from the electrical system of an aircraft must –

- (a) provide adequate illumination for all instruments and equipment, used by the flight crew and which are essential for the safe operation of the aircraft; and
- (b) be adequate to provide illumination in all passenger compartments, if any.

(3) An owner or operator of a helicopter may not operate the helicopter by night unless such helicopter is equipped with in the case of a flight by night within 10 nautical miles –

- (a) a light or lights providing adequate illumination both forward and downward to facilitate safe approaches, landings and take-offs; or
- (b) two serviceable landing lights which are capable of providing adequate illumination both forward and downward to facilitate safe approaches, landings and take-offs.

(4) An owner or operator of a seaplane or an amphibious aircraft may not operate such seaplane or amphibious aircraft unless it is equipped with –

- (a) the instruments and equipment referred to in subregulation (1), (2) or (3); and
- (b) when operating on water by night, display lights to conform with the Convention on the International Regulations for Preventing Collisions at Sea (COLREGs), adopted on the 20 October 1972 and entered into force on 15 July 1977.

(5) The navigation lights to be displayed by aircraft by night, on the water or on the manoeuvring area of an aerodrome, must be as provided for in Document NAM-CATS-OPS 91.

Flight, navigation and associated equipment for aircraft operated under VFR

91.04.4 An owner or operator of an aircraft may not operate the aircraft in accordance with VFR, unless such aircraft is equipped with the following functioning equipment –

- (a) a magnetic compass;
- (b) an accurate time-piece showing the time in hours, minutes, and seconds;
- (c) a barometric altimeter;
- (d) an airspeed indicator; and
- (e) if so required for use in designated airspace is equipped in accordance with regulation 91.04.5, unless authorised by the responsible air traffic service unit.

Flight, navigation and associated equipment for aircraft operated under IFR

91.04.5 (1) An owner or operator of an aircraft may not operate an aircraft in accordance with IFR or if the aircraft cannot be maintained in a desired attitude without visual reference to one or more flight instruments unless if such aircraft is equipped with functioning navigation equipment appropriate to the route to be flown, and –

- (a) a magnetic compass;
- (b) an accurate time-piece showing the time in hours, minutes and seconds;
- (c) for large aeroplanes, two independent sensitive pressure altimeter systems with subscale settings, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight and for all other aircraft, one sensitive pressure altimeter with subscale settings, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight;
- (d) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing;
- (e) a vertical-speed indicator;
- (f) a stabilised direction indicator;
- (g) a turn-and-bank indicator or a turn co-ordinator incorporating a slip indicator;
- (h) an attitude indicator and for large aeroplanes for which an individual certificate of airworthiness was first issued after 1 January 1975, an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating, for a minimum period of 30 minutes, an attitude indicator, clearly visible to the pilot-in-command;
- (i) a means of indication, in the cockpit or in the flight deck, of the outside air temperature in degrees celsius;
- (j) a chart holder or knee pad in an easily readable position which can be illuminated for operations by night;

- (k) a means of measuring and displaying whether the supply of power to the gyroscopic instruments is adequate; and
- (l) a pressure-altitude reporting transponder.

(2) The emergency power supply referred to in subparagraph (h) must be automatically operative after the total failure of the main electrical generating system and give a clear indication on the instrument panel that the attitude indicators are being operated by emergency power.

(3) An owner or operator of a pressurised aircraft may not operate the aircraft when carrying passengers at night or under instrument meteorological conditions if such aeroplane is not equipped with operative weather-detecting equipment capable of detecting thunderstorms whenever the aircraft is being operated in areas where such conditions may be expected to exist along the route.

Additional equipment for single-pilot operation under instrument meteorological conditions or at night

91.04.6 An owner or operator of an aircraft may not conduct single-pilot operations in an aircraft under instrument meteorological conditions or at night unless such aircraft has been certificated for single-pilot operations and –

- (a) the single pilot flying the aircraft is equipped with a headset with boom microphone or equivalent and has a transmit button positioned in such a way that it may be operated without the pilot having to remove his or her hands from the control wheel, joystick or cyclic stick;
- (b) the aircraft is equipped with a means of displaying charts that enables such aircraft to be readable in all ambient light conditions;
- (c) if the aircraft is flown under instrument meteorological conditions, such aircraft has been certificated for single pilot IFR operations and is equipped with a serviceable automatic flight control system with at least altitude hold and heading mode; or
- (d) in the case of a helicopter, if it is flown at night under visual meteorological conditions such helicopter is equipped with a serviceable automatic flight control system with at least altitude and heading mode or similar equipment, but this requirement does not apply to a helicopter –
 - (i) operated in the circuit of the aerodrome of departure;
 - (ii) over densely populated, well-lighted areas as contemplated in regulation 91.06.32(2); or
 - (iii) is not flown higher than 3 500 feet above the minimum height provided for in these regulations.

Mach number indicator

91.04.7 An owner or operator of an aircraft with speed limitations expressed in terms of Mach number may not operate the aircraft unless such aircraft is equipped with a Mach number indicator.

Radio altimeter

91.04.8 An owner or operator of a helicopter may not operate the helicopter on a flight over water at a distance from land corresponding to more than 10 minutes at normal cruise speed, unless such helicopter is equipped with a radio altimeter with an audio voice warning or other aural means of notifying the flight crew when operating below a preset height and with a visual warning capable of alerting the flight crew when operating below a preset height selectable by the flight crew.

Equipment for operations in icing conditions

91.04.9 (1) An owner or operator of an aircraft may not operate the aircraft in forecast or actual icing conditions unless such aircraft is certificated and equipped to operate in icing conditions.

(2) An owner or operator of an aircraft may not operate an aircraft in forecast or actual icing conditions by night unless such aircraft is equipped with a means to illuminate or detect the formation of ice.

(3) The means of illumination referred to in subregulation (2), must be of a type which does not cause glare or reflection which may handicap flight deck crew members in the performance of their duties.

(4) A flight, to be planned or expected to operate in suspected or known ground icing conditions, may not take off unless the aircraft has been inspected for icing and, if necessary, has been subjected to appropriate ground de-icing.

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

Flight recorders

91.04.10 (1) For the purposes of this regulation any reference to –

- (a) a specified date upon which an application for a type certification is submitted to a contracting state means a date upon which such application is made for a new aircraft type, not a date of certification of particular aircraft variants or derivative models; and
- (b) a specified date upon which an individual certificate of airworthiness is first issued means the first time a certificate of airworthiness is issued for a new individual aircraft serial number that has just come off the assembly line.

(2) A person may not operate an aircraft engaged in international general aviation operations which –

- (a) is a turbine-engined aeroplane with a Maximum Certificated take-off Mass of 5700 kilogram or less for which an individual certificate of airworthiness was first issued on or after 1 January 2016 unless such aircraft is equipped with a flight data recorder that complies with the requirements provided for in Document NAM-CATS-OPS 91; or
- (b) is a helicopter with Maximum Certificated take-off Mass exceeding 3180 kilogram for which an individual certificate of airworthiness was first issued on or after 1 January 2016 unless such helicopter is equipped with a flight data recorder that complies with the requirements provided for in Document NAM-CATS-OPS 91;

- (3) A person may not operate an aircraft engaged in international general aviation operation which –
- (a) is a turbine-engined aeroplane with a Maximum Certificated take-off Mass of 5700 kilogram or more for which an individual certificate of airworthiness was first issued on or after 1 January 2023 unless such aircraft is equipped with a flight data recorder that complies with the requirements provided for in Document NAM-CATS-OPS 91;
 - (b) is a turbine-engine aeroplane with Maximum Certificated take-off Mass exceeding 5 700 kilogram, required to be operated by more than one pilot for which an application for type certification was submitted to a contracting state on or after 1 January 2016, unless if such aircraft is equipped with a cockpit voice recorder or a cockpit audio recording system which complies with the requirements prescribed in Document NAM-CATS-OPS 91.
- (4) A person may not operate a turbine engine aeroplane with Maximum Certificated take-off Mass exceeding 5 700 kilogram for which a type certificate was first issued on or after 1 January 2016 and required to be operated by more than one pilot unless such aeroplane is equipped with either a cockpit voice recorder or a cockpit audio recording system.
- (5) A cockpit voice recorder referred to in this Subpart must retain the information recorded during at least the last two hours of operation.
- (6) A person may not operate an aircraft for which the individual certificate of airworthiness is first issued on or after 1 January 2016 and which is required to be fitted with a cockpit voice recorder or for aeroplanes, a cockpit audio recording system, unless the cockpit voice recorder or cockpit audio recording system, as applicable, is provided with an independent power source that complies with the requirements provided for in Document NAM-CATS-OPS 91.
- (7) A person may not operate an aircraft for which the individual certificate of airworthiness was first issued on or after 1 January 2016, which utilises any data link communications and is required to carry a cockpit voice recorder, unless all data link communications messages to and from the aircraft are recorded on a data link recorder or other flight recorder.
- (8) The minimum recording duration of the data link communications referred to in subregulation (7) must be equal to the duration of the cockpit voice recorder and must be correlated to the recorded cockpit audio.
- (9) A person may not operate an aircraft which is modified on or after 1 January 2016 to install and utilise any data link communications and which is required to carry a cockpit voice recorder, unless the data link communications messages are recorded on a data link recorder or other flight recorder.
- (10) A flight data recorder required in terms of this Part must be provided for in Document NAM-CATS-OPS 91 and be capable of retaining the information recorded during at least –
- (a) in the case of an aeroplane, the last 25 hours of its operation; or
 - (b) in the case of a helicopter, the last 10 hours of its operation.
- (11) A cockpit voice recorder or cockpit audio recording system required by this regulation must meet the specific recorded information time as provided for in Document NAM-CATS 91.
- (12) A person may not use the following mediums to record any information or data required to be recorded in terms of this Part –

- (a) engraving metal foil, photographic film or frequency modulation (FM) in flight data recorders, aircraft data recording system, Airborne Image Recorder or Airborne Image Recording System; and
 - (b) from 1 January 2016, magnetic tape in flight data recorders and magnetic tape and wire in cockpit voice recorders.
- (13) A flight recorder may not be switched off during flight.
- (14) A flight recorder installed in an aircraft must meet the installation, crashworthiness and fire protection specifications provided for in Document NAM-CATS-OPS 91 and must be located and installed in such a manner that maximum practicable protection is provided, such that, in the event of an accident or incident, recorded data may be recovered in a preserved and intelligible state.
- (15) A owner or operator of an aircraft must ensure that retrieving the recorded data from the storage medium will be readily possible.
- (16) A pilot-in-command or owner or operator of an aircraft must, in the event an aircraft becomes involved in an accident or incident, ensure to the extent possible, that –
- (a) all related flight recorder records, and if possible the associated flight recorders, are preserved and retained in safe custody pending their disposition to the accident or incident investigation team;
 - (b) a flight recorder is deactivated upon completion of flight time following an accident or incident; and
 - (c) a flight recorder is not reactivated before its disposition to the accident or incident investigation team.
- (17) A owner or operator of an aircraft must ensure that the quality assurance programme of the organisation responsible for the maintenance of his or her aircraft includes verification of the measurement range, recording interval and accuracy of parameters on installed flight recorder equipment.
- (18) A owner or operator of an aircraft must ensure that documentation concerning parameter allocation, conversion equations, periodic calibration and other serviceable or maintenance information is maintained by the organisation responsible for maintenance of his or her aircraft.
- (19) The documentation referred to in subregulation (18) must be sufficient to ensure that the accident investigation authorities have the necessary information to read out the data in engineering units.
- (20) The cockpit voice recorder and flight data recorders referred to in this part may be combined.
- (21) A pilot-in-command of an aircraft may commence a flight with flight data recorders inoperative, except that –
- (a) such aircraft may not depart from an aerodrome if repairs or replacements to each flight data recorders can be made;
 - (b) such aircraft does not exceed six further consecutive flights with an flight data recorders unserviceable;

- (c) not more than 48 hours have elapsed since such flight data recorders became unserviceable;
 - (d) such flight data recorders is not combined with cockpit voice recorder and an aircraft is equipped with cockpit voice recorder that is serviceable and functioning in accordance with the requirements provided for in Document NAM-CATS-OPS 91; and
 - (e) for an aircraft with an approved MEL, such aircraft is operated in accordance with that MEL.
- (22) A pilot-in-command of a aircraft may commence a flight with cockpit voice recorder or cockpit audio recording system inoperative, except that –
- (a) such aircraft may not take-off from an aerodrome if repairs or replacements to such cockpit voice recorder can be made;
 - (b) such aircraft does not exceed six further consecutive flights with cockpit voice recorder unserviceable;
 - (c) not more than 48 hours have elapsed since such cockpit voice recorder became unserviceable;
 - (d) any flight data recorders required to be carried is operative, unless such flight data recorders is combined with a cockpit voice recorder; and
 - (e) for aircraft with an approved MEL, such aircraft is operated in accordance with such MEL.
- (23) An owner or operator of an aircraft may not use the recordings or transcripts of cockpit voice recorder, cockpit audio recording system, Class A AIR, and Class A airborne image recording system for any other purposes other than for purposes of an investigation of an accident or incident in terms of regulations related to aircraft accident and incident investigations, except if such recordings or transcripts are –
- (a) related to a safety-related event identified in the context of an safety management system and are –
 - (i) restricted to the relevant portions of a de-identified transcript of the recording; and
 - (ii) subject to the protections stipulated in Part 140;
 - (b) sought for use in criminal proceedings not related to an event involving an aircraft accident or incident investigation and are subject to the protections stipulated in Part 140; or
 - (c) used for inspections of flight recorder systems as provided in this Part and its associated Document NAM-CATS-OPS 91.
- (24) An owner or operator of an aircraft may not use the recordings or transcripts of a flight data recorder, an aircraft data recording system as well as Class B and Class C AIR and Airborne Image Recording System for purposes other than the investigation of an accident or incident in terms of regulations related to aircraft accident and incident investigations, except if a recording or a transcript is subject to the protections provided for under Part 140 and are –

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

Seat, seat safety belt, harness, child restraint device and carriage of an infant

91.04.11 A person may not operate an aircraft unless such aircraft is equipped, as applicable, with –

- (a) a seat or berth for each person who is aged two years or more;
- (b) a safety belt with or without a diagonal shoulder strap or a safety harness, for use in each passenger seat for each passenger who is aged two years or more;
- (c) a safety belt for use in each passenger berth;
- (d) a child restraint device for the carriage of a child as provided for in Document NAM-CATS-OPS 91;
- (e) a safety harness for each flight crew member seat, incorporating a device which must automatically restrain the occupant's torso in the event of rapid deceleration; and
- (f) a safety harness for each cabin crew member seat, except that a safety belt with one diagonal shoulder strap is permitted if the fitting of a safety harness is not reasonably practical.

Stowage of articles, baggage and cargo

91.04.12 An owner or operator of an aircraft may not operate the aircraft unless all articles, baggage and cargo carried on board, excluding those items in use by either the flight crew or by passengers, if such use is not prohibited in the interest of the safety of the aircraft or its occupants, are placed –

- (a) in a manner which prevents movement likely to cause injury or damage and does not obstruct aisles and exits; or
- (b) in stowage designed to prevent movement likely to cause injury or damage.

First aid and universal precaution kits

91.04.13 (1) An owner or operator of an aircraft used in general aviation operations may not operate the aircraft unless such aircraft is equipped with the first aid kit consisting of the medical supplies as provided for in Document NAM-CATS-OPS 91.

(2) An owner or operator of an aircraft must carry out periodical inspections of the first aid kit to ensure that, as far as practicable, the contents of such first aid kit are in a condition necessary for its intended use.

(3) The contents of the first aid kit must be replenished at regular intervals, in accordance with instructions contained on their labels or as circumstances require.

(4) The first aid kit must be readily accessible to the crew or passengers.

(5) An owner or operator of an aircraft used in general aviation operations for which the maximum certificated passenger seating is 20 or more and in which a cabin attendant is carried, may not operate the aircraft unless such aircraft is equipped with universal precaution kits specified in Document NAM-CATS-OPS 91.

(6) The contents of the universal precaution kits must be as provided for in Document NAM-CATS-OPS 91.

First aid oxygen

91.04.14 (1) An owner or operator of an aircraft in respect of which the carriage of a cabin crew member is required in terms of this Part, may not operate the aircraft unless such aircraft is equipped with the appropriate supply of first aid oxygen provided for in Document NAM-CATS-OPS 91.

(2) The conditions, rules, requirements, procedures or standards for first aid oxygen must be as provided for in Document NAM-CATS-OPS 91.

Supplemental oxygen in case of pressurised aircraft

91.04.15 (1) An owner or operator of a pressurised aircraft may not operate such aircraft unless such aircraft is equipped with the supplemental oxygen as provided for in Document NAM-CATS-OPS 91 and such oxygen may be used continuously whenever the circumstances for which its supply has been provided for prevail.

(2) An owner or operator of a pressurised aircraft may not operate the aircraft above 25 000 feet except if all flight crew members have available at their flight duty station a quick-donning type of oxygen mask which will readily supply oxygen upon demand.

Supplemental oxygen in case of non-pressurised aircraft

91.04.16 (1) An owner or operator of a non-pressurised aircraft may not operate the aircraft at altitudes between 10 000 feet and 12 000 feet for longer than 120 consecutive minutes intended flight time, or above 12 000 feet, unless if such aircraft is equipped with the supplementary oxygen as provided for in Document NAM-CATS-OPS 91 and such oxygen may be used continuously whenever the circumstances for which its supply has been provided prevail.

(2) The conditions, rules, requirements, procedures or standards for supplemental oxygen must be as provided for in Document NAM-CATS-OPS 91.

Flight crew protective breathing equipment

91.04.17 (1) A person may not operate a pressurised aircraft or an unpressurised aircraft with a maximum certificated take-off mass exceeding 5 700 kilograms and a maximum approved passenger seating configuration of more than 20 seats, at altitudes above 12 000 feet, except if such aeroplane –

(a) is equipped with equipment to protect the eyes, nose and mouth of each flight crew member while on flight deck duty and to provide oxygen for a period of at least 15 minutes;

- (b) has sufficient portable protective breathing equipment to protect the eyes, nose and mouth of all cabin crew members required to be carried in terms of this Part and to provide breathing gas for a period of at least 15 minutes; and
- (c) if no cabin crew member is carried, is equipped with portable protective breathing equipment to protect the eyes, nose and mouth of one member of the flight crew and to provide breathing gas for a period of at least 15 minutes.

(2) The supply for protective breathing equipment may be provided by supplemental oxygen referred to in regulation 91.04.15 or 91.04.16.

(3) The protective breathing equipment intended for use by flight deck crew, must be conveniently located on the flight deck and be easily accessible for immediate use by each required flight deck crew member at his or her assigned duty station.

(4) The protective breathing equipment intended for use by cabin crew must be installed adjacent to each required cabin crew member duty station.

(5) The easily accessible portable protective breathing equipment must be provided and located at, or adjacent to, the hand fire extinguishers, on condition that if the fire extinguisher is located inside a cargo compartment, the protective breathing equipment must be stowed outside, but adjacent to, the entrance to such compartment.

(6) The protective breathing equipment, while in use, must not prevent communication, if required.

Fire extinguishers

91.04.18 (1) An owner or operator of an aircraft may not operate an aircraft except if such aircraft is equipped with the appropriate fire extinguisher as provided for in Document NAM-CATS-OPS 91.

(2) Any agent used in a built-in fire extinguisher for each lavatory disposal receptacle for towels, paper or waste in an aircraft for which the individual certificate of airworthiness is first issued on or after 31 December 2011 and any extinguishing agent used in a portable fire extinguisher in an aircraft for which the individual certificate of airworthiness is first issued on or after 31 December 2018 must meet the applicable minimum performance requirements provided for in Document NAM-CATS-OPS 91.

Crash axes and crowbars

91.04.19 (1) An owner or operator of an aircraft with a maximum certificated take-off mass exceeding 5 700 kilograms or a maximum approved passenger seating configuration of more than nine seats, may not operate the aircraft except if such aircraft is equipped with at least one crash axe or crowbar located on the flight deck.

(2) If the maximum approved passenger seating configuration is more than 200 seats, an additional crowbar must be carried in the aircraft and located out of sight in or near the most rearward galley area.

Marking of break-in points

91.04.20 An owner or operator of an aircraft must ensure that, if areas of the fuselage suitable for break-in by rescue crews in an emergency, are marked on the aircraft, such areas must be marked in accordance with the requirements as provided for in Part 47.

Megaphones

91.04.21 An owner or operator of an aircraft with a maximum approved passenger seating configuration of more than 60 seats and which is carrying one or more passengers, may not operate the aircraft unless such aircraft is equipped with the appropriate portable battery-powered megaphones as provided for in Document NAM-CATS-OPS 91.

Emergency locator transmitters

91.04.22 (1) Except as provided in subregulation (3), an owner or operator of an aircraft specified in Document NAM-CATS-OPS 91 may not operate such aircraft unless it is equipped with one or more approved ELTs.

(2) The number and type of ELTs, the manner in which the ELT's are carried, the specifications to which the ELT's adhere to, the frequencies on which the ELT's are able to transmit and the manner in which they must be maintained are provided for in Document NAM-CATS 91.

(3) The following aircraft are exempted from the requirement referred to in subregulation (1) –

- (a) an aircraft engaged in flights remaining within a radius of 50 nautical miles from their point of departure;
- (b) an aircraft engaged in the aerial application of chemicals or other substances for agricultural purposes, and on flights incidental thereto;
- (c) a new aircraft on a flight for a purpose associated with its manufacture and preparation for delivery, but not when on its delivery flight;
- (d) an aircraft flown for the purpose of moving it to a place to have an approved ELT fitted or a fitted ELT repaired, removed or overhauled, except that only the required flight crew members may be carried on board;
- (e) an aircraft of which the ELT has been temporarily removed for inspection, repair, modification or replacement, as long as –
 - (i) the necessary logbook entries have been made;
 - (ii) a placard stating “ELT not installed or carried” has been installed in a position easily visible to the flight crew; and
 - (iii) a period of 90 days is not exceeded without an ELT;
- (f) an aircraft certified for research and development purposes;
- (g) an aircraft used for showing compliance with regulations or in crew training, air racing, air display or market surveys;
- (h) aircraft with an approved seating configuration of not more than one person;
- (i) aircraft operated related to operation of non-type certificated aircraft; or
- (j) any aircraft on a flight or a series of flights for which an exemption in writing has been granted by the Executive Director.

(4) All aircraft for which the individual certificate of airworthiness is first issued after 1 July 2008 must be equipped with at least one automatic ELT.

(5) The Executive Director must maintain a register of all aircraft equipped with 406 MHz ELT, which must contain the following particulars –

- (a) the nationality and registration marks of the aircraft;
- (b) particulars of the manufacturer's designation and serial number of the aircraft;
- (c) the full name and contact details of the registered owner of the aircraft;
- (d) the make and model number of the ELT;
- (e) the 15-digit unique identification number provided by the manufacturer of the ELT or the aircraft's Mode S transponder code; and
- (f) the names and contact details of the persons who know the aircraft's itinerary and who may be contacted 24 hours a day.

(6) On the payment of the appropriate fee as provided for in Part 187, an excerpt of the ELT register must be furnished to any person who requests such an excerpt.

(7) The fee as provided for in Part 187 is payable for the registration, deregistration and changing of an ELT.

Life jackets and other flotation devices

91.04.23 (1) A person –

- (a) may not operate an aeroplane other than an aeroplane referred to in paragraph (b) –
 - (i) if the aeroplane, flying over water and beyond gliding distance of land is not capable of continuing the flight to an aerodrome with the critical power-unit becoming inoperative at any point along the route or any planned diversion; or
 - (ii) if the aeroplane when taking off or landing at an aerodrome where the take-off or approach path is disposed over water that in the event of an incident, there would be a likelihood of a ditching,

unless such aeroplane is equipped with a flotation device or a life jacket containing a survivor locator light, for each person on board, stowed in a position easily accessible, with safety belt fastened, from the seat or berth of the person for whose use it is provided, and an individual infant flotation device, containing a locator survival light for use by each infant on board;

- (b) may not operate a seaplane or amphibious aeroplane unless such seaplane or amphibious aeroplane is equipped with –
 - (i) a flotation device or a life jacket containing a survivor locator light, for each person on board, stowed in a position easily accessible, with safety belt fastened, from the seat or berth of the person for whose use it is provided, and an individual infant flotation device, containing a survivor locator light, for use by each infant on board; and

- (ii) life jackets, other than the life jackets referred to in subparagraph (i), for 20 per cent of the number of persons on board such seaplane or amphibious aeroplane, located in the passenger compartment near the emergency exits and readily accessible;
 - (c) may not operate a helicopter over water beyond autorotative distance from land, other than only for take-off and initial climb, or final approach and landing, unless –
 - (i) each person on board is wearing a life jacket containing a survivor locator light; and
 - (ii) an individual infant flotation device containing a locator survival light for use by each infant on board, stowed in a position easily accessible for the person in which care the infant is; and
 - (d) may not operate a free balloon or airship over a body of water that may pose a risk of drowning to any person on board such free balloon or airship unless the operator has put in place appropriate flotation devices or alternative drowning preventative measures.
- (2) A person may not operate the following helicopters over water unless such helicopter is certificated as an amphibian helicopter or for ditching or is equipped with permanent or rapidly deployable emergency flotation equipment –
- (a) a performance Class 3 helicopter operating below a height that would permit such helicopter to complete an autorotation to a landing on land in the event of an engine failure;
 - (b) a performance Class 1 or 2 helicopter operating in a hostile environment more than 10 minutes from land that would be unable to maintain flight to a suitable landing site in the event of an engine failure; or
 - (c) a performance Class 1 helicopter operating in a non-hostile environment at a distance from land equivalent to 30 minutes at normal cruising speed or 50 nautical miles, whichever is the lesser,

but in the case of aerial spraying operations over water, the owner or operator may apply to the Executive Director for an exemption in terms of Part 3.

- (3) A sea state must be an integral part of ditching information.

Life rafts and survival radio equipment for extended over-water flights

91.04.24 A person may not operate an aircraft over water at a distance equivalent to 30 minutes at normal cruising speed or 50 nautical miles, whichever is the lesser, away from land unless such aircraft –

- (a) is equipped with life rafts sufficient to accommodate all persons on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided; and
- (b) is equipped with the survival equipment and complies with the provisions as provided for in Document NAM-CATS-OPS 91.

Survival equipment

91.04.25 A person may not operate an aircraft over areas where search and rescue would be especially difficult, unless if such aircraft is equipped with signalling devices and the appropriate survival equipment which complies with the provisions as provided for in Document NAM-CATS-OPS 91.

Seaplanes, amphibious aeroplanes and amphibious helicopters

91.04.26 A person may not operate a seaplane, amphibious aeroplane or amphibious helicopter on water unless it is equipped with –

- (a) one life jacket or equivalent individual floatation device, for each person on board, stowed in a position readily accessible from the seat or berth;
- (b) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring such seaplane, amphibious aeroplane or amphibious helicopter on water, appropriate to its size, mass and handling characteristics; and
- (c) equipment for making the sound signals provided for in the Convention on the International Regulations for Preventing Collisions at Sea (COLREGs), adopted on the 20 October 1972 and entered into force on 15 July 1977, where applicable.

Airborne collision avoidance system

91.04.27 (1) A person may not operate an aeroplane required to be equipped with airborne collision avoidance system except if he or she has completed the training and checking as specified in Document NAM-CATS-OPS 91.

(2) The airborne collision avoidance system training must be provided through an approved training programme.

(3) If an aircraft is equipped with an airborne collision avoidance system, such system must –

- (a) meet the specifications in, and function in accordance with, the relevant provisions of Document NAM-CATS-OPS 91; and
- (b) when serviceable, always be activated during flight in all airspace, including oceanic, international, foreign and domestic airspace, even if in terms of these regulations the carriage of airborne collision avoidance system equipment is not compulsory for that particular type of aircraft or the type of operation.

(4) If an airborne collision avoidance system becomes unserviceable during flight when operation of airborne collision avoidance system is mandatory, the pilot-in-command of that aircraft must inform the responsible air traffic service unit as soon as is practical.

(5) A pilot may not act as pilot-in-command of a Namibian registered aircraft during any period while an airborne collision avoidance system is activated unless such pilot is airborne collision avoidance system -current.

(6) If a flight crew receives a traffic avoidance instruction from an air traffic service unit that is in conflict with the resolution advisory message issued by the aircraft's approved airborne collision avoidance system, the airborne collision avoidance system resolution advisory takes priority over the air traffic service unit instruction.

(7) Instructions in respect of an airborne collision avoidance system operational use and event reporting are provided for in Document NAM-CATS-OPS 91.

(8) For the purpose of this regulation, an airborne collision avoidance system -current pilot means a pilot who, –

- (a) within the immediately preceding 12 months, completed initial airborne collision avoidance system II training;
- (b) within the immediate preceding two years, completed initial airborne collision avoidance system training and subsequently completed airborne collision avoidance system II renewal training more than nine months and less than 12 months after the earlier training; or
- (c) within the immediate preceding 12 months, completed a session of airborne collision avoidance system II cyclic training.

Aircraft on high altitude flights

91.04.28 (1) A person may not operate an aircraft intended to be operated at high altitudes unless such aircraft is equipped with oxygen storage and dispensing apparatus capable of storing and dispensing oxygen supplies in terms of Document NAM-CATS-OPS 91.

(2) A person may not operate a pressurized aircraft, for which the individual certificate of airworthiness was first issued on or after 1 January 1990, above 25 000 feet unless if such aircraft is equipped with a device to provide positive warning to the flight crew of any dangerous loss of pressurization.

(3) A person may not operate a pressurized aircraft, for which the individual certificate of airworthiness was first issued before 1 January 1990, above 25 000 feet unless if such aircraft is equipped with a device to provide positive warning to the flight crew of any dangerous loss of pressurization.

Terrain awareness and warning systems

91.04.29 (1) An turbine-engine aircraft of a maximum certificated take-off mass more than 5 700 kg or authorised to carry more than nine passengers operating in instrument meteorological conditions must be equipped with a terrain awareness warning system which has a predictive terrain avoidance function that meets the requirements specified in Document NAM-CATS-OPS 91.

(2) All turbine-engined aeroplanes of a maximum certificated take-off mass of 5 700 kg or less and authorised to carry more than five but not more than nine passengers may be equipped with a ground proximity warning system which has a forward-looking terrain avoidance function.

(3) A terrain awareness warning system installed in turbine-engine aircraft of a maximum certificated take-off mass of more than 5 700 kg or authorised to carry more than nine passengers for which the individual certificate of airworthiness was first issued after 1 January 2011 must provide, as a minimum, warnings of at least the circumstances specified in subregulation (8).

(4) Except as provided for in subregulation (5), each terrain awareness warning system required under subregulation (1) must be functioning properly prior to flight.

(5) An aircraft may be operated without a functioning terrain awareness warning system –

- (a) as provided for in an approved MEL; or
 - (b) if repairs cannot be effected at the aerodrome last operated into and the aircraft is flown by the most direct routing to the nearest facility where the repairs can be made.
- (6) A terrain awareness warning system must automatically provide a timely and distinctive warning to the flight crew when the aircraft is in a potentially hazardous proximity to the earth's surface.
- (7) All piston-engined aircraft of a maximum certificated take-off mass more than 5 700 kg or authorised to carry more than nine passengers may be equipped with a ground proximity warning system which has a forward-looking terrain avoidance function.
- (8) A ground proximity warning system must provide at a minimum, warnings of at least the following conditions –
- (a) excessive descent rate;
 - (b) excessive terrain closure rate;
 - (c) excessive altitude loss after take-off or go-around;
 - (d) unsafe terrain clearance while not in landing configuration such as –
 - (i) gear not locked down;
 - (ii) flaps not in a landing position;
 - (e) excessive descent below the instrument glide path; and
 - (f) voice callout “five hundred” when the airplane descends to 500 feet above the terrain or nearest runway elevation.

SUBPART 5

COMMUNICATION, NAVIGATION AND SURVEILLANCE EQUIPMENT

Communication equipment

91.05.1 (1) A owner or operator of a aircraft may not, without prior written approval by the Executive Director, operate an aircraft in a designated airspace or under IFR unless such aircraft is equipped with radio communication equipment capable of –

- (a) two-way communication at any time during the flight on such frequencies as provided for by the appropriate authority; and
- (b) receiving meteorological information at any time during flight.

(2) The radio communication equipment referred to in subregulation (1) must be capable of providing communication on the aeronautical emergency frequency 121.5 MHz.

(3) All flight crew members required to be on flight deck duty must communicate through boom or throat microphones below the transition level altitude.

(4) A owner or operator of a aircraft must ensure that a aircraft operated in accordance with the instrument flight rules or at night is provided with radio communication equipment, and such equipment must be capable of conducting two-way communication with those aeronautical stations and on those frequencies provided by the appropriate authority.

(5) If compliance with subparagraph (4) requires that more than one communication equipment unit be provided, each communication equipment must be independent of the other or others to the extent that a failure in anyone will not result in failure of any other.

(6) A owner or operator of an aircraft to be operated in accordance with VFR, but as a controlled flight, must unless if exempted by the Executive Director, ensure such aircraft is provided with radio communication equipment capable of conducting two-way communication at any time during flight with such aeronautical stations and on such frequencies as may be provided for by the appropriate authority or Executive Director.

(7) A owner or operator of an aircraft to be operated on extended flights over water or areas in which search and rescue would be especially difficult must unless if exempted by the appropriate authority, ensure such aircraft is provided with radio communication equipment capable of conducting two-way communication at any time during flight with such aeronautical stations and on such frequencies as may be provided for by the appropriate authority or Executive Director.

(8) The radio communication equipment contemplated in subregulations (4) to (7) must provide for communication on the aeronautical emergency frequency 121.5 MHz.

(9) For operations where communication equipment is required to meet an required communication performance specification for performance-based communication, the owner or operator of a aircraft must, in addition to the requirements specified in subregulations (4) to (7), ensure such aircraft –

- (a) is provided with communication equipment which will enable it to operate in accordance with the required communication performance specifications;
- (b) has information relevant to the aircraft required communication performance specification capabilities listed in the flight manual or other aircraft documentation approved by the Executive Director; and
- (c) if the aircraft is operated in accordance with an MEL, has information relevant to the aircraft required communication performance specification capabilities included in the MEL.

(10) The criteria for operations of a required communication performance specification for performance-based communication are as provided for in Document NAM-CATS-OPS Part 91.

(11) In establishing criteria for operations where a required communication performance specification for performance-based communication has been provided for, the Executive Director must require the operator or owner of an aircraft to establish –

- (a) normal and abnormal procedures, including contingency procedures;
- (b) flight crew qualification and proficiency requirements, in accordance with the appropriate required communication performance specifications;
- (c) a training programme for relevant personnel consistent with the intended operations; and

- (d) appropriate maintenance procedures to ensure continued airworthiness, in accordance with appropriate required communication performance specifications.

(12) The Executive Director must ensure that, in respect of those aircraft mentioned in subregulation (9), adequate provisions exist for –

- (a) receiving the reports of observed communication performance issued by monitoring programmes established as contemplated in Document NAM-CATS-OPS Part 91; and
- (b) taking immediate corrective action for individual aircraft, aircraft types or operators, identified in such reports as not complying with the required communication performance specifications.

Navigation equipment

91.05.2 (1) A owner or operator of a aircraft must ensure that the aircraft is provided with navigation equipment which will enable it to proceed –

- (a) in accordance with its flight plan; and
- (b) in accordance with the requirements of air traffic services,

except when, navigation for flights under VFR is accomplished by visual reference to landmarks or precluded by the Executive Director.

(2) For operations where a navigation specification for performance-based navigation is provided for in terms of Part 90, an aircraft must, in addition to the requirements specified in subregulation (1) –

- (a) be provided with navigation equipment that will enable it to operate in accordance with the prescribed navigation specifications;
- (b) have information relevant to the aircraft navigation specification capabilities listed in the flight manual or other aircraft documentation approved by the Executive Director for such operations; and
- (c) if the aircraft is operated in accordance with a MEL, have information relevant to the aircraft navigation specification capabilities included in the MEL.

(3) The criteria for operations where a navigation specification for performance-based navigation is as provided for in Document NAMCATS-OPS Part 91.

(4) In establishing criteria for operations where a navigation specification for performance-based navigation has been provided for, the Executive Director must require that the operator or owner establish –

- (a) normal and abnormal procedures including contingency procedures;
- (b) flight crew qualification and proficiency requirements, in accordance with the appropriate navigation specifications;
- (c) training for relevant personnel consistent with the intended operations; and
- (d) appropriate maintenance procedures to ensure continued airworthiness, in accordance with the appropriate navigation specifications.

(5) The Executive Director must issue a specific approval for operations based on performance-based navigation authorisation required navigation specifications.

(6) For flights in defined portions of airspace which are, based on regional air navigation agreement, and the specified minimum navigation performance specifications, an aircraft must be provided with navigation equipment which –

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

(7) An aircraft and aircraft navigation system operating in accordance with performance-based navigation requirements must be approved by the Executive Director for operation on the applicable required navigation performance routing and in required navigation performance designated airspace.

(8) An aircraft may not enter an RVSM airspace unless if –

- (a) such aircraft has a valid RVSM specific approval issued by the Executive Director as provided for in the Document NAM-CATS-OPS 91;
- (b) its minimum RVSM equipment as specified in an approved MEL is serviceable;
- (c) its flight crew has successfully completed RVSM training as provided for in Document NAM-CATS-OPS 91; and
- (d) such aircraft is operated as provided in an air traffic service unit clearance to climb or descend through RVSM airspace to or from levels above RVSM flight level band.

(9) The requirements for the issue of an RVSM specific approval, including minimum equipment, maintenance and crew training requirements are provided for in Document NAM-CATS-OPS 91.

(10) The Executive Director may issue an RVSM specific approval only if he or she is satisfied that –

- (a) vertical navigation performance capability of an aircraft satisfies the requirements specified in Document NAM-CATS-OPS 91;
- (b) an aircraft owner or operator has instituted appropriate procedures in respect of continued airworthiness, maintenance and repair practices and programmes;
- (c) an aircraft owner or operator has instituted appropriate flight crew procedures for operation in RVSM airspace;
- (d) an aircraft is provided with equipment which is capable of –
 - (i) indicating, to a flight crew, a flight level being flown;
 - (ii) automatically maintaining a selected flight level;
 - (iii) providing an alert to flight crew when a deviation occurs from a selected flight level;

- (iv) indicating the calibration of an alert system threshold which may not exceed an approximate height of 300 feet;
- (v) automatically reporting pressure-altitude; and

(e) in the event of the failure of one item of equipment at any stage of a flight, the remaining equipment will enable an aircraft to navigate in accordance with RVSM.

(11) The Executive Director may when considering an application for an RVSM specific approval, conduct an investigation considered as necessary to ascertain compliance with the requirements for RVSM operations as provided for in Document NAM-CATS-OPS 91.

(12) If the Executive Director is not so satisfied with compliance referred to in subregulation (4) the Executive Director must notify an applicant for a concerned RVSM specific approval of the reasons for such dissatisfaction and grant such applicant an opportunity to rectify any shortcoming within a determined period, after which period the Executive Director may grant or refuse the application concerned.

(13) If the Executive Director is satisfied that an applicant has complied with the relevant requirements, he or she must issue an RVSM specific approval in the format as provided for in Document NAM-CATS-OPS 91.

(14) The Executive Director must maintain a register of all RVSM specific approvals issued in terms of this regulation.

(15) A register of RVSM specific approvals referred to in subregulation (14) must contain the following particulars, which must be recorded in the register within 30 days from the date of issue of an RVSM specific approval –

- (a) make, model, and registration marks of an aircraft;
- (b) full names of the owner of the aircraft or names of an air service licence holder and an air service licence number, where applicable;
- (c) postal address of an RVSM specific approval holder; and
- (d) date on which an RVSM specific approval was issued.

(16) A register of RVSM specific approval must be kept in a safe place at the office of the Executive Director or at a location approved by the Executive Director.

(17) A person may request the Executive Director to furnish the person with a copy of a register of RVSM specific approvals referred to in subregulation (14) and the Executive Director may furnish such a copy to such a person upon the payment of the appropriate fee provided for in Part 187.

(18) A person may apply for a RVSM specific approval to the holder of such RVSM specific approval or to an AMO approved under Part 145, which is responsible for the servicing and maintenance of the concerned aircraft and such holder or AMO may issue such RVSM specific approval to that person.

(19) An application for a duplicate RVSM specific approval must –

- (a) be made in the appropriate form as provided for in Document NAM-CATS-OPS 91; and

- (b) be accompanied by –
 - (i) data package referred to in Document NAM-CATS-OPS 91; and
 - (ii) the appropriate fee as provided for in Part 187.
- (20) A holder of an RVSM specific approval must –
 - (a) report any occurrence involving poor height-keeping in an RVSM environment as specified in Document NAM-CATS 91 within 24 hours; and
 - (b) make an effective, timely response to each height-keeping error.
- (21) An aircraft owner or operator authorised to operate in RVSM airspace must ensure that as a minimum each aircraft type grouping of its fleet must have their height-keeping performance monitored as defined in Document NAM-CATS 91 at least once every two years or within intervals of 1 000 flight hours per aircraft, whichever period is longer.
- (22) An aircraft owner or operator found to be operating in an RVSM airspace, within or outside Namibia, without a valid specific approval must be subjected to enforcement action by the Executive Director.

Surveillance equipment

- 91.05.3** (1) An aircraft owner or operator must install or ensure that an aircraft is installed with surveillance equipment which will enable it to operate in accordance with the requirements of air traffic services.
- (2) For operations where surveillance equipment is required to meet required surveillance performance specifications for Performance-based surveillance, an aircraft must, in addition to the requirements provided in subregulation (1) –
- (a) be provided with surveillance equipment which will enable it to operate in accordance with the required surveillance performance specifications;
 - (b) have information relevant to the aircraft required surveillance performance specification capabilities listed in the flight manual or other aircraft documentation approved by the state of design or state of registry; and
 - (c) have information relevant to the aircraft required surveillance performance specification capabilities included in the MEL where applicable.
- (3) For operation where an required surveillance performance specification for Performance-based surveillance is provided for, an owner or operator of an aircraft must establish –
- (a) normal and abnormal procedures, including contingency procedures for such operation;
 - (b) flight crew qualification and proficiency requirements, in accordance with appropriate required communication performance specifications;
 - (c) a training programme for relevant personnel consistent with the intended operations;
 - (d) appropriate maintenance procedures to ensure continued airworthiness in accordance with appropriate required communication performance specifications; and

- (e) a monitoring programme to receive reports of observed communication performance for submission to the Executive Director.

(4) Prior to operating an aircraft in a specific area, an operator or pilot-in-command must ensure that the aircraft is equipped with a functional Mode C, Mode S, automatic dependent surveillance-B or automatic dependent surveillance-C transponder as appropriate for the operating area concerned.

- (5) An owner or operator of an aircraft referred to in subregulation (2) must –

- (a) establish a monitoring programme; and
- (b) submit reports to the Executive Director of observed surveillance performance derived from information collected by the monitoring programme.

(6) The Executive Director must take immediate corrective action for individual aircraft, aircraft types, or operators identified in such reports as not complying with the Required surveillance performance specifications.

Installation

91.05.4 The equipment installation must be such that the failure of any single unit required for communications, navigation or surveillance purposes or any combination of such units will not result in the failure of another unit required for communications, navigation or surveillance purposes.

Electronic navigation data management

91.05.5 (1) The owner or operator of an aircraft may not employ electronic navigation data products that have been processed for application in the air and on the ground unless the state of registry has approved the operator's procedures for ensuring that the process applied and the products delivered have met acceptable standards of integrity and that the products are compatible with the intended function of the existing equipment.

(2) The state of registry must ensure that the owner or operator of an aircraft continues to monitor both the process and products.

(3) The owner or operator of an aircraft must implement procedures that ensure the timely distribution and insertion of current and unaltered electronic navigation data to all necessary aircraft.

SUBPART 6 RULES OF AIR

DIVISION ONE: APPLICABILITY AND COMPLIANCE

Applicability

91.06.1 This Subpart applies to airspace users and aircraft –

- (a) operating into, within or out of Namibia;
- (b) bearing the nationality and registration marks of Namibia and operating in any airspace to the extent that they do not conflict with the rules published by the state having jurisdiction over the territory flown over.

Flight over high seas

91.06.2 (1) For flight over the high seas, the rules specified in Annex 2 to the Chicago Convention apply without exception.

(2) For those parts of the high seas where a member state has accepted, pursuant to an ICAO regional air navigation agreement, the responsibility of providing air traffic services, a member state must designate the air traffic service provider for providing those services.

Compliance with rules of air and air traffic control clearances and instructions

91.06.3 (1) The operation of an aircraft either in flight or on the movement area of an aerodrome must comply with the general rules in this Sub-part and, in addition, when in flight, either in compliance with VFR or IFR.

(2) The pilot of an aircraft must –

- (a) comply with any air traffic control clearance which is obtained from an air traffic service unit, unless the pilot obtains an amended clearance from that air traffic service unit;
- (b) operate the aircraft in accordance with any instruction issued by an air traffic service unit in an area in which an air traffic control service is provided; and
- (c) when deviating from an air traffic control clearance or instruction, notify the air traffic service unit of the deviation, as soon as practicable.

(3) The pilot of an aircraft must include the information specified in Document NAM-CATS-OPS 91 when requesting a deviation from an air traffic control clearance or flight planned altitude or route.

(4) Nothing in these regulations relieves the pilot-in-command of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories by airborne collision avoidance system equipment, as will best avert a collision.

Responsibility for compliance with rules of air

91.06.4 (1) The pilot-in-command of an aircraft must, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with the rules of the air, except that the pilot-in-command may depart from these rules in emergency circumstances that render such departure necessary in the interests of safety.

(2) The pilot-in-command of an aircraft must before beginning a flight, be familiar with all available information appropriate to the intended operation, such as preflight action for flights away from the vicinity of an aerodrome, all IFR flights, a careful study of available current weather reports and forecasts, taking into consideration fuel requirements and an alternative course of action if the flight cannot be completed as planned.

Authority of pilot-in-command

91.06.5 (1) The pilot-in-command is responsible for the operations and safety of the aircraft and for the safety of all persons on board, during flight.

(2) The pilot-in-command of an aircraft must have final authority as to the disposition of the aircraft while in command.

(3) All persons on board an aircraft must obey all lawful commands given by the pilot-in-command of the aircraft for the purpose of ensuring the safety and security of such aircraft, of persons or property to enable good order and discipline on board the aircraft.

Problematic use of psychoactive substances

91.06.6 (1) A person whose function is critical to the safety of aviation (safety-sensitive personnel) may not undertake that function while under the influence of any psychoactive substance, by reason of which human performance is impaired.

(2) The person referred to in subregulation (1) may not engage in any kind of problematic use of substances.

DIVISION TWO: GENERAL RULES AND COLLISION AVOIDANCE

Negligent or reckless operation of aircraft

91.06.7 The pilot-in-command may not operate an aircraft in a negligent or reckless manner so as to endanger the life or property of others.

Minimum heights

91.06.8 (1) The pilot-in-command may not fly an aircraft over the congested areas of cities, towns or settlements or over an open-air assembly of persons, except –

- (a) when necessary for take-off or landing;
- (b) by permission from the appropriate authority; or
- (c) if such aircraft is flown at such a height as will permit, in the event of an emergency arising and a landing to be made, is without undue hazard to persons or property on the surface.

(2) The pilot-in-command of an aircraft must, in addition to the requirements of this regulation, comply with any altitude restrictions provided for in the area or route to be operated within or over the area referred to in regulations 91.06.32 and 91.06.37.

Cruising levels

91.06.9 (1) The cruising levels at which a flight or a portion of a flight is to be conducted must 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.

(2) The pilot-in-command of an aircraft in level flight must fly at an altitude or flight level, as appropriate, selected according to magnetic track from the table provided for in Document NAM-CATS-OPS 91, unless if directed otherwise by an air traffic service unit.

(3) The pilot-in-command flying an aircraft in accordance with VFR at a height of less than 1 500 feet above the surface, is not required to comply with the provisions of subregulation (2), unless if directed otherwise by an air traffic service unit.

Dropping objects, spraying or dusting

91.06.10 Except in an emergency or unless granted special permission by the Executive Director or approved by an air traffic service unit, an article may not be dropped from an aircraft in flight unless such article is –

- (a) fine sand or clean water used as ballast; or
- (b) chemical substances for the purpose of spraying, dusting or cloud seeding.

Towing

91.06.11 The pilot-in-command of an aircraft in flight may not permit anything to be towed by the aircraft except with the prior written approval of the Executive Director and as indicated by relevant information, advice or clearance from the appropriate air traffic service unit.

Parachute descents

91.06.12 Parachute descents, other than emergency descents, may only be made as contemplated in –

- (a) Part 105; and
- (b) as indicated by any relevant information, advice or clearance from the appropriate air traffic services unit.

Acrobatic flight

91.06.13 An aircraft may not be flown acrobatically except under conditions provided for under regulation 91.07.30 and as indicated by relevant information, advice or clearance from the appropriate air traffic services unit.

Formation flights

91.06.14 (1) A person may not operate an aircraft in formation flight while carrying passengers for commercial purposes in such proximity to other aircraft so as to create a collision or hazard, except –

- (a) as provided for in subregulation (2), –
- (a) by arrangement with the pilot-in-command of each aircraft in the formation.

(2) The formation of flight in controlled airspace may be approved by an air traffic service unit, except where –

- (a) the formation operates as a single aircraft with regard to navigation and position reporting;
- (b) separation between aircraft in the flight is the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and must include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and breakaway; and
- (c) a distance not exceeding 1 kilometre 0.5nm (nautical mile) laterally and longitudinally and 30 metre (100 ft) vertically from the flight leader is maintained by each aircraft.

- (3) Formation flight for display purposes may be approved by the Executive Director.

Unmanned free balloons

91.06.15 An unmanned free balloon must be operated in such a manner as to minimise hazards to persons, property or other aircraft and in accordance with Part 102 Operation of free balloons.

Prohibited areas and restricted areas

91.06.16 (1) The Executive Director may give notice in the AIP of an area that is designated as a prohibited area or restricted area as contemplated in Subpart 5 of Part 71 and must in such notice specify—

- (a) a height above the ground surface of such area; or
- (b) an altitude in respect of such area, as the Executive Director may consider expedient, in the notice in question.

(2) A person may not fly any aircraft in the air space above a prohibited area –

- (a) below the height specified in terms of subregulation (1)(a); or
- (b) below the altitude specified in terms of subregulation (1)(b), in respect of the prohibited area in question.

(3) The Executive Director may by notice in the AIP declare any area to be a restricted area and must, when so declaring an area to be a restricted area, specify in such notice –

- (a) the nature and extent of the restriction applicable in respect of the area in question; and
- (b) the authorisation under which flights in such restricted area are permitted.

(4) A person may not, in contravention of a restriction contemplated in subregulation (3), fly any aircraft to which the said restriction applies, in any restricted area, unless the flight in question has been permitted by virtue of an authorisation contemplated in subregulation (3).

Proximity

91.06.17 The pilot - in - command may operate an aircraft in such proximity to other aircraft as to create a collision hazard.

Right of way

91.06.18 (1) An aircraft which has the right-of-way, must maintain its heading and speed, but nothing in these regulations relieves the pilot-in-command of an aircraft from the responsibility of taking such action as will best avert collision, including collision avoidance manoeuvres based on resolution advisories provided by airborne collision avoidance system equipment.

(2) An aircraft which is obliged, by provisions of this Subpart, keep out of the way of another aircraft, must avoid passing over or under the other aircraft, or crossing ahead of such aircraft, unless passing is well clear, taking into account the effects of wake turbulence.

- (3) If two aircraft are approaching head-on or approximately so and there is danger of collision, each aircraft must alter its heading to the right.
- (4) If two aircraft are converging at approximately the same level, the aircraft which has the other aircraft on its right, must give way, except in the following circumstances –
- (a) a power-driven heavier-than-air aircraft must give way to airships, gliders and balloons;
 - (b) an airship must give way to gliders and balloons;
 - (c) gliders must give way to balloons;
 - (d) a power-driven aircraft must give way to aircraft which are –
 - (i) seen to be towing other aircraft or objects;
 - (ii) carrying an underslung load or are engaged in winching operations; and
 - (iii) being towed or tethered.
- (5) An aircraft which is being overtaken has the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, must keep out of the way of the overtaken aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft may absolve the overtaking aircraft from its obligation until such aircraft is entirely past and clear, on condition that where a right-hand circuit is being followed at an aerodrome, the overtaking aircraft must alter its heading to the left.
- (6) An aircraft in flight or operating on the ground or water, must give way to other aircraft landing or on final approach to land.
- (7) If two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, the aircraft at the higher level must give way to the aircraft at the lower level, but –
- (a) the latter aircraft may not take advantage of this provision to cut in front of another aircraft which is on final approach to land or to overtake such aircraft; and
 - (b) power-driven heavier-than-air aircraft must give way to gliders in all circumstances.
- (8) An aircraft about to take-off, may not attempt to do so until there is no apparent risk of collision with other aircraft.
- (9) An aircraft which is aware that another aircraft is compelled to land, must give way to such aircraft.
- (10) An aircraft taxiing on the manoeuvring area of an aerodrome must give way to aircraft taking off or about to take off.
- (11) For the purposes of this regulation, an overtaking aircraft is an aircraft which approaches another aircraft from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter aircraft and will be in such position with reference to the other aircraft, that by night it may not be able to see either of the other aircraft's wingtip navigation lights.
- (12) In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome or equivalent part of an operating site, the following apply –

- (a) when two aircraft are approaching head on, or approximately so, each aircraft must stop or where practicable alter its course to the right so as to keep well clear;
- (b) when two aircraft are on a converging course, the one which has the other on its right must give way;
- (d) an aircraft which is being overtaken by another aircraft must have the right-of-way and the overtaking aircraft must keep well clear of the other aircraft.
- (c) an aircraft taxiing on the manoeuvring area must stop and hold at all runway-holding positions unless an explicit clearance to enter or cross the runway has been issued by the aerodrome control tower.

(13) An aircraft taxiing on the manoeuvring area of an aerodrome must stop and hold at all lighted stop bars and may proceed further when the stop bar lights are switched off.

Lights to be displayed by aircraft

91.06.19 (1) All aircraft must, except as contemplated in subregulation (4) and unless the aircraft was initially type-certificated without such lights or is a non-type certificated aircraft approved without such lights, display –

- (a) while operating in flight during the day and at all times at night, anti-collision lights intended to attract attention to such aircraft;
- (b) while operating during night, navigation lights intended to indicate the relative path of the aircraft to an observer;
- (c) while operating on the movement area of an aerodrome, lights intended to attract attention to the aircraft, as specified in the IAIP; and
- (d) while operating with engines running on the movement area of an aerodrome, a rotating beacon to indicate that fact.

(2) All aircraft on the movement area of an aerodrome during night must, except as provided by subregulation (4), display –

- (a) navigation lights intended to indicate the relative path of the aircraft to an observer; and
- (b) lights intended to indicate the extremities of their structure, unless stationary and otherwise adequately illuminated.

(3) An aircraft's other lights may not be displayed if they are likely to be mistaken for the lights referred to in subregulations (1)(b) and (2)(a).

(4) A pilot is permitted to switch off or reduce the intensity of any flashing lights fitted in order to meet the requirements of subregulations (1), (2) and (3) if they do or are likely to –

- (a) adversely affect the satisfactory performance of duties; or
- (b) subject an outside observer to harmful dazzle.

(5) The lights which must be displayed by aircraft by day, night, on water or on the manoeuvring area of an aerodrome, is provided for in Document NAM-CATS-OPS 91.

Simulated instrument flights in aircraft

91.06.20 (1) The owner or operator of an aircraft must ensure that no person operates the aircraft in simulated instrument flight in VMC unless –

- (a) the other aircraft control seat is occupied by a safety pilot who possesses at least a private pilot license with category and class ratings appropriate to the aircraft being flown;
- (b) the safety pilot has adequate vision forward to each side of the aircraft or there is a competent observer in the aircraft who adequately supplements the vision of the safety pilot; and
- (c) the aircraft is fitted with fully functioning dual controls, except that the simulated instrument flight may be conducted in a single-engine aircraft, equipped with a single, functioning throw-over control wheel in place of fixed dual controls of the elevator and ailerons, if –
 - (i) the safety pilot has determined that the flight can be conducted safely; and
 - (ii) the person manipulating the controls has at least a PPL with appropriate category, class and type ratings.

(2) If a simulated instrument flight takes place at night in VMC, the safety pilot must be the holder of a valid instrument rating.

(3) If a simulated instrument flight is being practised for the purpose of obtaining an instrument rating, the safety pilot must be an appropriately rated flight instructor.

Operation on and in vicinity of aerodrome

91.06.21 (1) The pilot-in-command of an aircraft operated on or in the vicinity of an aerodrome, is responsible for compliance with the following rules –

- (a) observe other aerodrome traffic for the purpose of avoiding collision;
- (b) conform with or avoid the pattern of traffic formed by other aircraft in operation;
- (c) make all turns to the left when approaching for a landing and after taking off, unless otherwise instructed by an air traffic service unit or unless a right-hand circuit is in force, but a helicopter may, with due regard to other factors and when it is in the interest of safety, execute a circuit to the opposite side;
- (d) land and take off, as far as practicable, into the wind unless the safety, the runway configuration or air traffic considerations dictate that a different direction is preferable or unless instructed otherwise by an air traffic service unit; and
- (e) fly across the aerodrome or its environs at a height of not less than 2 000 feet above the level of such aerodrome, on condition that if circumstances require such pilot-in-command to fly at a height of less than 2 000 feet above the level of the aerodrome, he or she must conform with the traffic pattern at such aerodrome.

(2) If an aerodrome control tower is in operation, the pilot-in-command must also, while the aircraft is within the aerodrome traffic zone –

- (a) maintain a continuous radio watch on the frequency of the aerodrome control tower responsible for providing aerodrome control services at the aerodrome, establish two-way radio communication as necessary for aerodrome control purposes and obtain such clearances for his or her movements as may be necessary for the protection of aerodrome traffic; and
 - (b) if the requirements referred to in subparagraph (a) are not possible, keep a watch for and comply with such clearances and instructions as may be issued by visual means.
- (3) If an aerodrome flight information service unit is in operation, the pilot-in-command must also, whilst the aircraft is within the aerodrome traffic zone –
- (a) maintain a continuous radio watch on the frequency of the aerodrome flight information service unit responsible for providing aerodrome flight information service at the aerodrome, establish two-way radio communication as necessary for aerodrome flight information service purposes, obtain information in respect of the surface wind, runway in use and altimeter setting and in respect of aerodrome traffic on the manoeuvring area and in the aerodrome traffic zone; or
 - (b) if the requirements referred to in subparagraph (a) are not possible, keep a watch for visual signals which may be displayed or may be issued by the aerodrome flight information service unit.
- (4) An aircraft which is unable to communicate by radio must, before landing at an aerodrome, make a circuit of the aerodrome for the purpose of observing the traffic, and reading such ground markings and signals as may be displayed thereon, unless if it has the consent of the appropriate air traffic service unit to do otherwise.

Water operations

- 91.06.22** (1) If two aircraft or an aircraft and a vessel are approaching one another and there is a risk of collision, the aircraft must proceed with careful regard to the existing circumstances and conditions including the limitations of the respective aircraft.
- (2) An aircraft which has another aircraft or a vessel on its right must give way so as to keep well clear of such other aircraft or vessel.
- (3) An aircraft approaching another aircraft or a vessel head-on or approximately so, must alter its heading to the right to keep well clear of such other aircraft or vessel.
- (4) An aircraft or vessel which is being overtaken has the right of way, and the one overtaking must alter its heading to keep well clear of such other aircraft or vessel.
- (5) Aircraft landing on or taking off from the water must, insofar as practicable, keep well clear of all vessels and avoid impeding their navigation.
- (6) All aircraft on the water must display lights between sunset and sunrise as provided for in Document NAM-CATS-OPS 91.
- (7) In areas in which the Convention on the International Regulations for Preventing Collisions at Sea (COLREGs), adopted on the 20 October 1972 and entered into force on 15 July 1977, are in force, aircraft operated on the water must comply with the provisions of the that convention.

Submission of a flight plan

91.06.23 (1) The owner or operator of an aircraft must ensure that an ATS flight plan is completed if required in terms of subregulation (4).

(2) The items to be contained in the ATS flight plan must be as provided for in NAM-CATS-OPS 91.

(3) The ATS flight plan must be filed with the appropriate air traffic service unit unless other arrangements have been made for submission of repetitive flight plans and such unit is responsible for transmitting such ATS flight plan to all air traffic service unit concerned with the flight.

(4) The ATS flight plan must be filed prior to operating –

(a) all flights to be conducted in a controlled or advisory airspace, except that this requirement may not apply in respect of –

(i) a local flight;

(ii) a flight crossing an airway or advisory routes at right angles; or

(iii) a VFR flight entering or departing from an aerodrome traffic zone or control zone, from or to an unmanned aerodrome and if no other controlled or advisory airspace will be entered during the flight;

(b) an international flight;

(c) all flights undertaken for the purposes of commercial air transport operations issued in terms of the Air Services Act;

(d) any flight within or into a designated area or along designated routes, if required by the appropriate ATS authority in order to facilitate the provision of flight information, alerting and search and rescue services; and

(e) any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority in order to facilitate coordination with the appropriate military units or with air traffic service units in adjacent states in order to avoid the possible need for interception for the purpose of identification.

(5) An air traffic service unit may instruct a flight for which an ATS flight plan is required in terms of subregulation (4) and for which an ATS flight plan has not been filed, to clear or to remain clear of controlled airspace, and not to cross the border of Namibia or to enter its airspace until such time as the required ATS flight plan has been filed.

(6) Unless otherwise authorised by the responsible air traffic service unit, an ATS flight plan for a flight to be conducted in controlled or advisory airspace must be filed –

(a) for domestic flights, at least 30 minutes before departure;

(b) for international flights, at least 60 minutes before departure; or

(c) if filed during flight while outside controlled or advisory airspace for a flight to be conducted in such airspace, it must be filed with the responsible air traffic service unit at least 10 minutes before the aircraft is estimated to reach the intended point of

entry into the controlled or advisory airspace or the point of crossing the airway or advisory route.

- (7) The pilot-in-command of an aircraft operating –
- (a) an IFR or controlled VFR flight must ensure that all changes which become applicable to an ATS flight plan before departure or in flight are reported, as soon as practicable, to the responsible air traffic service unit;
 - (b) other VFR flights, changes regarding fuel endurance or total number of persons carried on board must be, as a minimum, reported to the responsible air traffic service unit .

(8) If an ATS flight plan has been filed with an air traffic service unit prior to departure and is not activated with an air traffic service unit within one hour of original estimated time of departure or amended estimated time of departure, the ATS flight plan must be regarded as cancelled and a new ATS flight plan must be filed.

(9) If an air traffic service unit is not in operation at the aerodrome of intended landing, the pilot-in-command must submit a report of arrival as provided for in Document NAM-CATS-OPS 91 must be submitted to an air traffic service unit , by the quickest means of communication available, immediately after landing, in respect of a flight for which an ATS flight plan was submitted and not as yet closed or for which search and rescue notification was requested and designated with a particular air traffic service unit .

Closing of a flight plan

91.06.24 (1) If communication facilities at the arrival aerodrome are inadequate and alternate arrangements for the handling of arrival reports on the ground are not available, the pilot -in-command must, prior to landing the aircraft or immediately after landing such aircraft, if practicable, transmit to the appropriate air traffic service unit, a message comparable to an arrival report, in respect of a flight for which an ats flight plan was submitted and not as yet closed or for which a search and rescue notification was requested with a nominated air traffic service unit .

(2) Subject to regulation 91.06.25 (1), the pilot-in command must ensure that the aircraft adheres to the current ATS flight plan filed for a controlled flight, unless –

- (a) a request for a change has been made and accepted by the air traffic service unit responsible for the controlled airspace in which the aircraft is operating; or
- (b) an emergency arises which necessitates immediate action, in which event the responsible air traffic service unit must, as soon as circumstances permit, be notified of the action taken and that such action was taken under emergency authority.

Changes to a flight plan

91.06.25 (1) In the event of a controlled flight inadvertently deviating from its current ATS flight plan, the pilot-in command must –

- (a) if the aircraft is off track, adjust the heading of an aircraft to regain track as soon as practicable;
- (b) if the aircraft deviates from an ATC clearance with an assigned Mach number or indicated airspeed, inform an appropriate air traffic service unit immediately;

- (c) if the aircraft deviates from an assigned Mach number by approximately Mach 0.02 or from true airspeed by approximately 10 knot, inform an appropriate air traffic service unit;
 - (d) except where automatic dependent surveillance-contract is activated, serviceable and usable, notify an appropriate air traffic service unit as soon as possible if the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first changes in excess of two minutes, or such other period of time as is determined by an appropriate ATS provider; and
 - (e) if the aircraft deviates from its altitude, take action to correct such altitude deviation.
- (2) If an automatic dependent surveillance agreement is in place, the pilot-in-command must inform the air traffic service unit automatically via data link whenever changes occur beyond the threshold values stipulated by the automatic dependent surveillance event contract.
- (3) If prior to departure it is anticipated that, subject to a re-clearance in flight, a decision may be taken to proceed to a revised destination aerodrome, the appropriate air traffic service unit must be so notified by the insertion in the flight plan of information concerning the revised route, where known, and the revised destination.
- (4) The revised destination referred to in subregulation (3) must be subject to the fuel and oil provisions referred to in regulation 91.07.12.

Signals

- 91.06.26** (1) The pilot-in-command of an aircraft in flight must, upon observing or receiving any of the signals as provided for in Document NAM-CATS-OPS 91, take such action as may be required by the interpretation of the signal as provided for in Document NAM-CATS-OPS 91.
- (2) A person may not perform the functions of a signalperson unless trained and qualified to carry out such functions as contained in Document NAM-CATS-OPS 91.
- (3) A person acting as a signalperson is responsible for providing the standard marshalling signals to aircraft in a clear and precise manner, as provided for in Document NAM-CATS-OPS 91.

Use of time

- 91.06.27** (1) For the purposes of reporting and recording time, coordinated universal time must be used and must be expressed in hours and minutes and, when required, seconds of the 24-hour day beginning at midnight.
- (2) A time check must be obtained from an air traffic services unit, if possible, prior to operating a controlled flight and at such other times during the flight as may be necessary.
- (3) If time is utilised in the application of data link communications, it must be accurate to within 1 second of coordinated universal time.

DIVISION THREE: AIR TRAFFIC CONTROL SERVICE

Air traffic control clearance

- 91.06.28** (1) An air traffic control clearance must be obtained prior to operating a controlled flight or a portion of a flight as a controlled flight and such clearance must be requested through the submission of a flight plan to an air traffic control unit if required under 91.06.23.

(2) If an aircraft has requested a clearance involving priority, the pilot-in-command must, if requested by the appropriate air traffic service unit, submit a report explaining the necessity for such priority.

(3) If prior to departure, the pilot-in command or a person authorised by an operator anticipates that depending on fuel endurance and subject to re-clearance in flight, he or she may make a decision to proceed to a revised destination aerodrome, that pilot-in-command or a person authorised by an operator must notify the appropriate air traffic control units by the insertion in the flight plan of the information concerning the revised route and the revised destination.

(4) An aircraft operated on a controlled aerodrome may not taxi on the manoeuvring area without clearance from the aerodrome control tower and must comply with any instructions given by that air traffic service unit.

Adherence to current flight plan

91.06.29 (1) The pilot-in-command of an aircraft must adhere to the current flight plan or the applicable portion of a current flight plan submitted for a controlled flight except –

- (a) as provided for in subregulation (7);
- (b) if a request for a change has been made and clearance obtained from the appropriate air traffic control unit; or
- (c) if an emergency arises which requires immediate action by the aircraft, in which event as soon as circumstances permit, after such emergency authority is exercised, the pilot-in-command must notify the appropriate air traffic services of the action taken and that this action has been taken under emergency authority.

(2) Unless otherwise authorised by the appropriate ATS authority or directed by the appropriate air traffic control unit, controlled flights must, insofar as practicable –

- (a) when on an established ATS route, operate along the defined centre line of that route; or
- (b) when on any other route, operate directly between the navigation facilities or points defining that route.

(3) An aircraft operating along an ATS route segment defined by reference to VHF omnidirectional radio ranges must change over for its primary navigation guidance from the facility behind the aircraft to that ahead of it at or as close as operationally feasible to, the changeover point, where established.

(4) If the pilot-in-command deviates from the requirements of subregulation (6)(b) he or she must notify the appropriate air traffic services unit.

(5) If the pilot-in-command inadvertently deviates a controlled flight from its current flight plan, such pilot-in-command must take the following action –

- (a) if the aircraft is off track, that pilot-in-command must adjust the heading of the aircraft to regain track as soon as practicable;
- (b) if the average true airspeed at cruising level between reporting points varies or is expected to vary by plus or minus five percent of the true airspeed, from that given in the flight plan, such pilot-in-command must inform the appropriate air traffic unit;

- (c) if the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first, is found to be in error in excess of three minutes from that notified to air traffic services or such other period of time as is provided for by the appropriate ATS authority or on the basis of air navigation regional agreements, the pilot-in-command of an aircraft must as soon as possible notify the appropriate air service traffic unit of a revised estimated time; or
- (d) if an automatic dependent surveillance agreement is in place, the pilot-in-command of an aircraft must inform the air traffic services unit automatically via data link whenever changes occur beyond the threshold values stipulated by the automatic dependent surveillance event contract.
- (6) A request for flight plan changes must include the following information –
 - (a) change of cruising level, aircraft identification, requested new cruising level and cruising speed at this level and revised time estimates when applicable at subsequent flight information region boundaries;
 - (b) change of route: destination unchanged:
 - (i) aircraft identification;
 - (ii) flight rules;
 - (iii) description of new route of flight including related flight plan data beginning with the position from which requested change of route is to commence;
 - (iv) revised time estimates; and
 - (v) any other pertinent information;
 - (c) change of route: destination changed:
 - (i) aircraft identification;
 - (ii) flight rules;
 - (iii) description of revised route of flight to revised destination aerodrome including related flight plan data, beginning with the position from which requested change of route is to commence;
 - (iv) revised time estimates;
 - (v) alternate aerodrome; and
 - (vi) any other pertinent information.
- (7) If it becomes evident that flight in VMC in accordance with its current flight plan will not be practicable, the pilot-in-command of an aircraft with a VFR flight operated as a controlled flight must –
 - (a) request an amended clearance enabling the aircraft to continue in VMC to destination or to an alternative aerodrome or to leave the airspace within which an ATC clearance is required;

- (b) if a clearance in accordance with paragraph (a) cannot be obtained, continue to operate in VMC and notify the appropriate ATC unit of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome;
 - (c) if operated within a controlled zone, request authorisation to operate as a special VFR flight; or
 - (d) request clearance to operate in accordance with the instrument flight rules.
- (8) The pilot-in-command flying in controlled airspace, in advisory airspace or on a flight for which alerting action is being provided must ensure that –
- (a) that reports are made to the responsible air traffic service unit, as soon as possible, of the time and level of passing each compulsory reporting point, together with any other required information;
 - (b) position reports are similarly made in relation to additional reporting points, if so requested by the responsible air traffic service unit; and
 - (c) in the absence of designated reporting points, position reports are made at the intervals specified by the responsible air traffic service unit or published by the Executive Director in terms of Part 175 for that area.
- (9) The pilot-in-command of a controlled flight providing position information to the appropriate air traffic service unit, via data link communications may only provide voice position reports when requested.
- (10) The pilot-in-command of a controlled flight must, except when landing at a controlled aerodrome, advise the appropriate ATC unit as soon as it ceases to be subject to air traffic control service.
- (11) The pilot-in-command of an aircraft must ensure that –
- (a) before the aircraft enters a controlled airspace, two-way radio contact is established with the responsible air traffic service unit on the designated radio frequency; and
 - (b) while the aircraft is within, and until it leaves, the controlled airspace, that continuous radio watch is maintained on such designated radio frequency and that such further two-way radio communication as such air traffic service unit may require, is established except that –
 - (i) the air traffic service unit may permit an aircraft not capable of maintaining continuous two-way radio communication, to fly in the control area, terminal control area, control zone or aerodrome traffic zone for which it is responsible, if traffic conditions permit, in which case the flight must be subject to such conditions as such air traffic service unit considers necessary to ensure the safety of other air traffic; and
 - (ii) in the case of radio failure, a flight for which an air traffic service flight plan was filed and activated by the air traffic service unit on receipt of a departure time, may continue in controlled airspace, if the communication failure procedures specified in Document NAM-CATS-OPS 91 are complied with.
- (12) The pilot-in-command of an aircraft must ensure that before the aircraft approaches or enters an advisory airspace –

- (a) two-way radio communication with the responsible air traffic service unit is established on the designated radio frequency;
 - (b) if such communication is not possible, two-way radio communication is established with any air traffic service unit which is capable of relaying messages to and from the responsible air traffic service unit; or
 - (c) if such communication is not possible, broadcasts are made on the designated radio frequency giving information on the aircraft's intention to enter the airspace, and such pilot-in-command must ensure that, while the aircraft is within the advisory airspace and until it departs there from, a continuous radio watch is maintained on the designated radio frequency and that –
 - (i) such further two-way radio communication as the responsible air traffic service unit may require, is established with any other air traffic service unit which is capable of relaying messages to and from such responsible air traffic service unit;
 - (ii) if such communication is not possible, such further two-way radio communication is established with any other air traffic service unit which is capable of relaying messages to and from the responsible air traffic service unit, as such responsible air traffic service unit may require; or
 - (iii) if such communication is not possible, broadcasts are made on the designated radio frequency giving information on passing reporting points and when leaving the airspace concerned, except that –
 - (aa) an aircraft maintaining a Selcal watch while operating within an advisory route in the Namibian flight information region and whose Selcal callsign has been communicated to the Namibian flight information centre, is considered to be maintaining a continuous radio watch; and
 - (ab) in the case of a radio failure, a flight for which an air traffic service flight plan was filed and activated by an air traffic service unit on receipt of a departure time, may continue in advisory airspace if the communication failure procedures specified in Document NAM-CATS-OPS 91 are complied with.
- (13) If there is a communication failure, the pilot-in-command of an aircraft must comply with the voice communication failure procedures provided for in Document NAM-CATS-OPS 91 and comply with the following procedures as appropriate –
- (a) the pilot-in-command aircraft must attempt to establish communications with the appropriate air traffic control unit using all other available means;
 - (b) the pilot-in-command aircraft, when forming part of the aerodrome traffic at a controlled aerodrome, must keep a watch for such instructions as may be issued by visual signals;
 - (c) If in VMC, the pilot-in-command aircraft must continue to fly in visual meteorological conditions, land at the nearest suitable aerodrome and report its arrival by the most expeditious means to the appropriate air traffic control unit;

- (d) If in instrument meteorological conditions, or when the pilot of an IFR flight considers it inadvisable to complete the flight in accordance with VMC conditions, the pilot-in-command aircraft must –
- (i) in the airspace where radar is not used in the provision of air traffic control, maintain the last assigned speed and level or minimum flight altitude if higher, for a period of 20 minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan;
 - (ii) in airspace where radar is used in the provision of air traffic control, maintain the last assigned speed and level or minimum flight altitude if higher, for a period of seven minutes following:
 - (aa) the time the last assigned level or minimum flight altitude is reached; or
 - (ab) the time the transponder is set to Code 7600;
 - (ac) the aircraft's failure to report its position over a compulsory reporting point;

whichever is later, and thereafter adjust level and speed in accordance with the filed flight plan;

- (iii) when being radar vectored or having been directed by ATC to proceed offset using RVAV without a specified limit, rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude;
- (iv) proceed according to the current flight plan route to the appropriate designated navigation aid or fix serving the destination aerodrome and, when required to ensure compliance with paragraph (v), hold over this aid or fix until commencement of descent;
- (v) commence descent from the navigation aid or fix specified in paragraph (iv) at, or as close as possible to, the expected approach time last received and acknowledged or if no expected approach time has been received and acknowledged, as close as possible to, the estimated time of arrival resulting from the current flight plan;
- (vi) complete a normal instrument approach procedure as specified for the designated navigation aid or fix; and
- (vii) land, if possible, within 30 minutes after the estimated time of arrival specified in subparagraph (v) or the last acknowledged expected approach time, whichever is later.

Unlawful interference

91.06.30 (1) The pilot-in-command of an aircraft which is being subjected to unlawful interference –

- (a) must notify the appropriate air traffic service unit of the unlawful interference, any significant circumstances associated with such interference and any deviation from the current flight plan necessitated by the unlawful interference, in order to enable the air traffic service unit to give priority to the aircraft and to minimise conflict with other aircrafts;

- (b) must attempt to land as soon as practicable at the nearest suitable aerodrome or at a dedicated aerodrome assigned by the appropriate authority unless considerations aboard the aircraft dictate otherwise; and
- (o) immediately report the unlawful interference unless he or she is unable to, in which case the owner or operator of the aircraft must report the act of unlawful interference with the operation of the aircraft or the appropriate authority of the pilot-in-command –
 - (i) if the act of unlawful interference occurs within Namibia, to the Executive Director; or
 - (ii) if the act of unlawful interference occurs within or over the territory of a foreign state, to the appropriate authority of the state and the Executive Director;

(2) The pilot-in-command of an aircraft, that is equipped with a flight deck door, must always ensure that from the moment the passenger entry doors are closed in preparation for departure until they are opened on arrival, that the flight deck door is closed and locked from within the flight deck.

VMC visibility and distance from cloud

91.06.31 (1) A VFR flight must be conducted in a manner that the aircraft is flown with visual reference to the surface by day and to identifiable objects by night and at no time above more than three eighths of cloud within a radius of five nautical miles of such aircraft and –

- (a) in the case of aircraft excluding helicopters, operating under conditions of visibility and distance from cloud equal to, or greater than, the conditions specified in Tables 1 and 2 apply, except that the minima specified in Table 1 are not applicable when entering or leaving a control zone and the flight has received clearance from an air traffic service unit to operate under Special VFR minima as referred to in regulation 91.06.34; and

Table 1

Airspace	Forward Flight visibility	Distance from clouds	Ground visibility and ceiling
Control zones	Five kilometres	Horizontally: 600 metres Vertically: 500 feet	A aircraft may not take-off from, land at, or approach to land at an aerodrome or fly within the control zone when the ground visibility at the aerodrome concerned is less than five km and the ceiling is less than 1 500 feet. ⁽¹⁾
Within an aerodrome traffic zone (which does not also comprise a control zone or part of a control zone)	Five kilometres	Horizontally: 600 metres Vertically: 500 feet	A aircraft may not take-off from, land at or approach to land at an aerodrome or fly within the aerodrome traffic zone when the ground visibility within such aerodrome traffic zone is less than five km and the ceiling is less than 1500 feet.

Table 2
In Airspaces other than those specified in Table 1

Airspace class	Altitude band	Forward Flight visibility	Distance from cloud
C F G	At and above 10 000 feet above MSL	eight kilometres	1 500 metre horizontally 1 000 feet vertically
C F G	Below 10 000 feet AMSL and above 3 000 ft above MSL, or above 1 000 feet above terrain, whichever is the higher	five kilometres	1 500 metre horizontally 1 000 feet vertically
C	At and below 3 000 feet above MSL, or 1 000 feet above terrain, whichever is the higher	five kilometres	1 500 metre horizontally 1 000 ft vertically
F G		five kilometres	Clear of cloud and with the surface in sight

- (b) in the case of helicopters, under conditions of visibility and distance from cloud equal to, or greater than, those conditions specified in Tables 3 and 4 apply, except that –
- (i) the limitations as contained in Table 3 may not prevent a helicopter from conducting hover-in-ground-effect or hover-taxi operations within the confines of a controlled aerodrome or heliport, if the visibility is not less than 100 metre,
 - (ii) the minima specified in Table 3 are not applicable when a helicopter is entering or leaving a control zone and such flight has received clearance from an air traffic service unit to operate under Special VFR minima as contemplated in regulation 91.06.34; and
 - (iii) helicopters must be permitted to operate in less than 1 500 metre flight visibility outside of controlled airspace, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

Table 3

Airspace	Flight visibility	Distance from clouds	Ground visibility and ceiling
Control zones	five kilometres	Horizontally: 300 metres Vertically: Clear of cloud	Except when operating under a SVFR clearance a helicopter may not take-off from, land at, or approach to land at an aerodrome or fly within the control zone when the ground visibility at the aerodrome concerned is less than 5 000 metres and the ceiling is less than 1 500 feet
Within an aerodrome traffic zone (which does not also comprise a control zone or part of a control zone)	five kilometres	Horizontally: 300 metres Vertically: Clear of cloud	A helicopter may not take-off from, land at, or approach to land at an aerodrome or fly within the aerodrome traffic zone when the ground visibility at the aerodrome concerned is less than 5 000 metres and the ceiling is less than 1 500 feet

Table 4
In Airspace other than those specified in Table 3

Airspace class	Altitude band	Flight visibility	Distance from cloud
C F G	At and above 10 000 feet above MSL	eight kilometres	1 500 metre horizontally 1 000 feet vertically
C F G	Below 10 000 ft AMSL and above 3 000 feet above MSL, or above 1 000 feet above terrain, whichever is the higher	five kilometres	1 500 metre horizontally 1 000 feet vertically
C	At and below 3 000 feet above MSL, or 1 000 feet above terrain, whichever is the higher	2 500 metres	1 500 metre horizontally 1 000 feet vertically
FG		1 500 metres unless in accordance with (iii) below	Clear of cloud and with the surface in sight

Provided that:

- (iv) the limitations as contained in Table 3 maynot prevent a helicopter from conducting hover-in-ground-effect or hover-taxi operations within the confines of a controlled aerodrome or heliport, if the visibility is not less than 100 m;
 - (v) the minima specified in Table 3 are not applicable when a helicopter is entering or leaving a CTR and such flight has received clearance from an ATSU to operate under Special VFR minima as provided for in Regulation 91.06.34; and
 - (vi) helicopters may be permitted to operate in less than 1 500 m flight visibility outside of controlled airspace, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.
- (2) VFR flight is not permitted –
- (a) at transonic or supersonic speed; or
 - (b) in Class A airspace.

DIVISSION FOUR: VISUAL FLIGHT RULES

Visual flight rules

91.06.32 (1) VFR flights must be conducted such that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in Tables 1 to 4, except when operating as a special VFR flight.

(2) VFR flights may not, except when a special VFR clearance is obtained from an air traffic control unit, take off or land at an aerodrome within a control zone or enter the aerodrome traffic zone or aerodrome traffic circuit when the reported meteorological conditions at that aerodrome are below the following minima –

- (a) the ceiling is less than 1 500 feet; or
- (b) the ground visibility is less than 5 kilometres

- (3) VFR flights may not be operated –
 - (a) above flight level 200; or
 - (b) at transonic and supersonic speeds,

unless authorised by the appropriate ATS authority.

(4) Authorisation for VFR flights to operate above flight level 290 may not be granted in areas where a vertical separation minimum of 1 000 feet is applied above flight level 290.

- (5) A VFR flight may not be flown –
 - (a) over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 1 000 feet above the highest obstacle within a radius of 600 metre from the aircraft; or
 - (b) elsewhere than as specified in subparagraph (a), at a height not less than 500 feet above the ground or water unless the flight can be made without hazard or nuisance to persons or property on the ground or water and the pilot-in-command operates at a height and in a manner that allows safe operation in the event of an engine failure,

except when necessary for take-off or landing, or except by permission from the appropriate authority.

- (6) An aircraft may not –
 - (a) be flown over congested areas or over an obvious open-air assembly of persons at a height less than 1 000 feet above the highest obstacle, within a radius of 2 000 feet from the aircraft;
 - (b) ,when flown elsewhere other than as contemplated in paragraph (a), be flown at a height less than 500 feet above the ground or water, unless if the flight can be made without hazard or nuisance to persons or property on the ground or water and the pilot-in-command operates at a height and in a manner that allows safe operation in the event of an engine failure; and
 - (c) circle over or do repeated overflights over an obvious open-air assembly of persons at a height less than 3 000 feet above the surface,

except when necessary for taking off, or landing, or except with prior written approval of the Executive Director.

(7) A helicopter may be permitted to be flown at heights less than those referred to subregulation (1)(a), provided that –

- (a) the operation is conducted without unnecessary nuisance or hazard to persons and property on the ground or water; and
- (b) the pilot-in-command operates at a height and in a manner that allows safe operation in the event of an engine failure.

(8) VFR flights in level cruising flight when operated above 3 000 feet from the ground or water or a higher datum as specified by the appropriate ATS authority, must be conducted at a flight level appropriate to the track as specified in the tables of cruising levels provided for in Document NAM-CATS-OPS 91, except where otherwise indicated in an air traffic control clearance or specified by the appropriate ATS authority.

- (9) VFR flights must comply with regulation 91.06.32–
 - (a) when operating within Classes B, C and D airspace;
 - (b) when forming part of aerodrome traffic at controlled aerodromes; or
 - (c) when operated as special VFR flights.

(10) The pilot-in-command operating VFR flight within or into areas, or along routes, designated by the appropriate ATS authority must maintain continuous air-ground voice communication watch on the appropriate communication channel of, and report its position as necessary to, the air traffic services unit providing flight information service.

Changes from VFR flight to IFR flight

91.06.33 (1) The pilot-in-command of an aircraft who elects to change the conduct of flight of the aircraft from compliance with VFR to compliance with IFR must, if a flight plan was submitted for the flight, communicate the necessary changes to its current flight plan with the air traffic service unit concerned.

(2) The pilot-in-command must, if required under regulation 91.06.23 to submit flight plans, submit a flight plan to the appropriate air traffic service unit as soon as practicable and obtain a clearance prior to proceeding IFR when in a controlled airspace.

Special VFR weather minima

91.06.34 (1) A pilot-in-command of an aircraft may only conduct Special VFR operations in weather conditions below the conditions provided for in regulation 91.06.32 within a control zone –

- (a) under the terms of an air traffic control clearance;
- (b) by day only;
- (c) with a cloud ceiling of at least 600 feet and visibility of at least 1 500metre, measured from the aerodrome reference point;
- (d) if the Special VFR flight will not unduly delay an IFR flight;
- (e) if the aircraft is equipped with two-way radio equipment capable of communicating with an air traffic service unit on the appropriate frequency; and
- (f) if leaving the control zone, in accordance with instructions issued by an air traffic service unit prior to departure.

(2) A pilot-in-command of a helicopter may only conduct Special VFR operations in weather conditions below the conditions referred to in regulation 91.06.32 within a control zone –

- (a) under the terms of an air traffic control clearance;
- (b) by day only with a cloud ceiling of at least 300 feet and visibility of at least 800 metre offshore;
- (c) when clear of clouds;

- (d) if the helicopter will be operated at such a speed that its pilot has adequate opportunity to observe any obstructions or other traffic in sufficient time to avoid collisions;
- (e) if a flight can be conducted in accordance with the minimum height, provided for in regulation 91.06.37; and
- (f) if a Special VFR flight will not unduly delay an IFR flight.

VFR flight determination and weather deterioration

91.06.35 (1) The pilot-in-command of an aircraft operating outside a control zone or an aerodrome traffic zone is responsible to ascertain whether or not weather conditions permit flight in accordance with VFR.

(2) If weather conditions do not permit a pilot to maintain the minimum distance from cloud and the minimum visibility required by VFR the pilot must –

- (a) if in controlled airspace, request an amended clearance enabling the aircraft to continue in VMC to the nearest suitable aerodrome or to leave the airspace within which an ATC clearance is required;
- (b) if no clearance in accordance with paragraph (a) can be obtained, continue to operate in VMC and land at the nearest suitable aerodrome, notifying the appropriate ATC unit of the action taken;
- (c) if operating within a control zone, request authorisation to operate as a special VFR flight; or
- (d) request clearance to operate in accordance with the IFR.

DIVISION FIVE: INSTRUMENT FLIGHT RULES RULES APPLICABLE TO ALL IFR FLIGHTS

Aircraft equipment

91.06.36 An aircraft operated with IFR must be equipped with suitable instruments and with navigation equipment appropriate to the route to be flown.

Minimum levels

91.06.37 (1) A pilot-in-command must, except when necessary for take-off or landing, or except when specifically authorised by the Executive Director, fly an IFR flight at a level which is not below the minimum flight altitude established by the state in whose territory it is overflown, or, if no such minimum flight altitude has been established –

- (a) over high terrain or in mountainous areas, at a level which is at least 2 000 feet above the highest obstacle located within eight kilometre of the estimated position of the aircraft;
- (b) elsewhere other than as specified in subparagraph (1), at a level which is at least 1 000 feet above the highest obstacle located within eight kilometer of the estimated position of the aircraft.

(2) A flight conducted above flight level 200 must be flown in compliance with IFR as provided for in this Subpart.

(3) Except when necessary for take-off or landing, or with the express permission of the Executive Director, an aircraft must at night, in instrument meteorological conditions or when operated in accordance with IFR, be flown –

- (a) at a height of at least 1 000 feet above the highest terrain or obstacle where the height of such terrain or obstacle does not exceed 5 000 feet above sea level within five nautical miles of the aircraft in flight; or
- (b) at a height of at least 2 000 feet above the highest terrain or obstacle located within five nautical miles of the aircraft in flight where the height of such terrain or obstacle exceeds 5 000 feet above sea level, but within areas determined by the Executive Director –
 - (i) the minimum height may be reduced to 1 000 feet above the highest terrain or obstacle located within five nautical miles of the aircraft in flight; and
 - (ii) the aircraft is flown in accordance with such procedures as the Executive Director may determine.

Change from IFR flight to VFR flight

91.06.38 (1) The pilot-in-command of an aircraft who elects to change the conduct of flight of the aircraft from compliance with IFR to compliance with VFR must, if a flight plan was submitted for the flight, notify the air traffic service unit concerned that the IFR flight is cancelled and communicate to such air traffic service unit the intended changes to be made to the current flight plan.

(2) If an aircraft operating under IFR is flown in or encounters VMC, the pilot-in-command may not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

Rules applicable to IFR flights within controlled airspace

91.06.39 (1) IFR flights must comply with the provisions of regulation 91.06.28 when operated in controlled airspace.

(2) An IFR flight operating in cruising flight in a controlled airspace must be flown at a cruising level, or, if authorised by ATS unit to employ cruise climb techniques, between two levels or above a level, selected from –

- (a) the table of cruising levels provided for in Document NAM-CATS-OPS 91, or
- (b) a modified table of cruising levels, provided for in Document NAM-CATS-OPS 91 for flights above flight level 410,

except that the correlation of levels to track may not apply, except if otherwise indicated in an air traffic control clearances or specified by the appropriate ATS authority in aeronautical information publications.

Rules applicable to IFR flights outside controlled airspace

91.06.40 (1) An IFR flight operating in level cruising flight outside of controlled airspace must be flown at a cruising level appropriate to its track as specified in –

- (a) the table of cruising levels in Document NAM-CATS-OPS 91, except when otherwise specified for a flight at or below 3 000 feet above mean sea level by the appropriate ATS authority; or
- (b) a modified table of cruising levels for flights above flight level 410, provided for in Document NAM-CATS-OPS 91.

(2) An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the ATS authority must maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the air traffic services unit providing flight information service.

(3) An IFR flight operating outside controlled airspace and required by the appropriate ATS authority to maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the air traffic services unit providing flight information service, must report position, as specified in this Part for controlled flights.

DIVISION SIX: AIRCRAFT ENGAGED UN OPERATIONS OTHER THAN SCHEDULED COMMERCIAL AIR TRANSPORT OPERATIONS

Foreign military aircraft

91.06.41 A foreign military aircraft may not, on the express invitation or express permission of the Ministry responsible for International Relations and Cooperations, fly over or land in ,but such aircraft flying over or landing in Namibia is exempt from these regulations to such extent and on such conditions as are specified in the invitation or permission.

Identification and interception of aircraft

91.06.42 (1) A person may not institute in-flight surveillance against, give an interception signal in connection with, or give an instruction to land to, a civilian aircraft suspected to be in contravention of the Act except –

- (a) on instruction by the Minister, the Executive Director, an authorised officer or authorised person; or
- (b) if the person is a member of the Namibian Police Services or Namibian National Defence Force, acting within the course and scope of his or her duties; and
- (c) the in-flight surveillance, interception signal or instruction to land is in the public interest.

(2) The in-flight surveillance, interception signal or instruction to land must be executed in a manner that does not unduly affect aviation safety.

(3) The intercepted aircraft must follow out the instructions of the intercepting aircraft as provided for in Document NAM-CATS-OPS 91.

(4) If an aircraft is intercepted, the pilot-in command must immediately establish radio contact with the intercepting aircraft on 121,5 MHz.

(5) If the intercepting aircraft cannot establish radio contact with or in any other practical way contact the intercepted aircraft, visual signals as provided for in Document NAM-CATS-OPS 91 must be used.

(6) The pilot-in-command of an aircraft flying in Namibian airspace must if intercepted comply with the procedures specified in this regulation.

(7) The pilot-in-command of an aircraft flying in foreign airspace must if intercepted comply with the interception procedures of that state.

DIVISION SEVEN: AIR TRAFFIC RULES

ATS procedures

91.06.43 The pilot-in-command of an aircraft to be operated in a controlled airspace must –

- (a) ensure that an ATS flight plan is submitted and changes to such flight ATS plan are notified as contemplated in regulation 91.06.23;
- (b) ensure that radio contact is established with the responsible air traffic service unit, and that radio communication is maintained as provided for in regulation 91.06.28 except where such communication is accomplished using air data link; and
- (c) for flight in controlled airspace, obtain and comply with air traffic control clearances and instructions, except that –
 - (i) the pilot-in-command of the aircraft may deviate from an air traffic control clearance in exceptional circumstances, on condition that such deviation must be reported to the responsible air traffic service unit as soon as possible; and
 - (ii) the pilot-in-command of an aircraft may propose an amendment to an air traffic control clearance, but such amendment may not be applied until acceded to by the responsible air traffic service unit.

Priority

91.06.44 (1) An air traffic service unit may, with regard to arrivals and departures, give priority to aircraft operating in accordance with ATS flight plan clearance over aircraft not so engaged.

(2) An air traffic service unit must give priority to certain flights regardless of whether such flight is operating on an ATS flight plan or not, if the pilot-in-command of the aircraft has notified the air traffic service unit that –

- (a) the aircraft is in a state of emergency, or the pilot-in-command has declared a distress or MAYDAY situation;
- (b) the pilot-in-command has declared an urgency or terms used to express extreme urgency situation;
- (c) the pilot-in-command has stated that there is a critically ill person on board the aircraft or the flight is operated as an emergency air ambulance flight and the type of flight has been annotated accordingly in the flight plan; or
- (d) the pilot-in-command has declared that the aircraft is in a state of minimum fuel.

(3) An air traffic service unit must, with regard to flight operations provided that there is no priority in force in terms of subregulation (2), give priority to an aircraft –

- (a) engaged in the transportation of the President or Deputy President;
- (b) engaged in the transportation of any visiting Head of State or foreign government official recognised by the Ministry responsible for International Relations and Cooperations as qualifying for priority services; or
- (c) engaged in operations related to national security, humanitarian emergencies, public safety emergencies or any other operation that the Executive Director authorises as qualifying for priority services.

(4) An aerodrome operator must, with regard to arrivals, departures and passenger movements, provided that there is no priority in force in terms of subregulation (2), give priority to aircraft –

- (a) engaged in the transportation of the President or Deputy President;
- (b) engaged in the transportation of any visiting heads state or foreign government official recognised by the Ministry responsible for International Relations and Cooperations as qualifying for priority services; or
- (c) engaged in operations related to national security, humanitarian emergencies, public safety emergencies or any other operation that the Executive Director authorises as qualifying for priority services.

(5) If an aircraft has requested a clearance involving priority in terms of subregulation (2), (3) or (4), a report explaining the necessity for such priority must be submitted by the pilot-in command if requested by the Executive Director, the appropriate air traffic service unit or the appropriate airfield operator.

SUBPART 7 FLIGHT OPERATIONS

Routes and areas of operation

91.07.1 The owner or operator of an aircraft must ensure that –

- (a) operations are only conducted along such routes or within such areas, for which approval or authorisation has been obtained, where required, from the appropriate authority concerned;
- (b) all flights are planned and conducted in accordance with any mandatory routings that have been published for any airspace being operated in, unless otherwise authorised in an air traffic control clearance;
- (c) the performance of the aircraft intended to be used, is adequate to comply with minimum flight altitude requirements; and
- (d) the instruments and equipment of the aircraft intended to be used, comply with the minimum requirements for the planned operation and will enable the flight crew to control the flight path of the aircraft, carry out any required procedural manoeuvres and observe the operating limitations of the aircraft in the expected operating conditions.

Minimum flight altitudes

- 91.07.2** (1) A pilot may not operate an aircraft at altitudes below –
- (a) altitudes, established by the owner or operator, which provide the required terrain clearance, taking into account the performance operating limitations referred to in Subpart 8; and
 - (b) the minimum heights referred to in Subpart 6,

except when necessary for take-off and landing.

(2) The method of establishing minimum flight altitudes referred to in subregulation (1) (a) is provided for in Document NAM-CATS-OPS 91.

(3) If the minimum flight altitudes established by the appropriate authority of a foreign state are higher than the minimum flight altitudes provided for in this regulation, the minimum flight altitudes established by such appropriate authority applies in respect of a Namibian registered aircraft flying in the airspace of the foreign state concerned.

Use of aerodromes

91.07.3 (1) A person may not select or authorise a selection of an aerodrome for use as a destination or destination alternate aerodrome, except if such aerodrome is determined to be adequate for the type of aircraft and operation concerned.

(2) An aircraft may not take-off or land by night, unless a place of take-off or landing is equipped with night flying facilities or in an emergency.

Helicopter landings and take-offs

91.07.4 (1) A pilot-in-command of a helicopter may not land at or take-off from any place unless the place is so situated to permit the helicopter, in the event of an engine failure arising during such landing or take-off, to continue to operate in a manner that allows safe operation of such helicopter without undue hazard to persons or property on the surface.

(2) The pilot-in-command of a helicopter must ensure that any place used for landing, take-off or hover –

- (a) has –
 - (i) physical characteristics; and
 - (ii) obstacle limitation surfaces, commensurate with the ambient light conditions and the characteristics of the helicopter being operated;
- (b) allows the helicopter to operate clear of obstacles and without causing nuisance to third parties through its rotor wash;
- (c) has a surface area suitable for touch-down and lift-off; and
- (d) meets the requirements contemplated in regulation 91.08.2.

(3) A pilot of a helicopter may not land on, or take-off from, any elevated helicopter landing place, unless such place is considered suitable by the pilot-in-command.

(4) A pilot of a helicopter may not land on, or take-off from, any elevated helicopter landing place situated within a built-up area, unless the helicopter landing place has been licenced or approved in terms of Part 139.

(5) A pilot-in-command of a helicopter may not land or take-off from any place within a built-up area unless he or she has assured him or herself that local regulations do not prohibit such take-off or landing without specific permission by the local authority, provided that this restriction may not apply to a helicopter engaged in an emergency medical service operation or undertaking a flight necessary for exercising any power in terms of any law.

(6) The Executive Director may, in the interests of aviation safety –

- (a) impose conditions or institute restrictions as to the use of any building, structure or place for the landing or take-off of helicopters;
- (b) require special flight procedures to be adopted at, or special routes to be followed to or from, building, structure or place referred to in paragraph (a) by helicopters; and
- (c) despite subparagraph (a) and (b), impose different conditions, institute different restrictions, or require different special flight procedures to be adopted in respect of different buildings, structures, or places.

(7) Nothing in this regulation is construed as conferring any right to land at any building, structure or place against the wishes of the owner of, or any other person who has an interest in, the building, structure or place or as prejudicing the rights or remedies of any person in respect of any injury to persons or property caused by the helicopter or its occupants.

Aerodrome operating minima

91.07.5 (1) A pilot of an aircraft may not use an aerodrome as a destination or alternate aerodrome, unless the operating minima for such aerodrome, established by the appropriate authority of the state in which the aerodrome is situated, can be complied with.

(2) The aerodrome operating minima for a specific type of approach and landing procedure is applicable if –

- (a) the ground equipment shown on the respective instrument approach and landing chart required for the intended procedure is operative;
- (b) the aircraft systems required for the type of approach are operative;
- (c) the equipment meets the appropriate airworthiness certification requirements; and
- (d) such owner or pilot-in-command of an aircraft has an approval to use the aerodrome operations minima for a specific type approach and landing procedure.

(3) In determining or establishing the aerodrome operating minima applicable to any particular operation, the owner or operator of an aircraft must take into account –

- (a) the type, performance and handling characteristics of the aircraft;
- (b) the composition of the flight crew, their competence and experience;
- (c) the surface condition, dimensions and characteristics of the runways or touch-down areas which may be selected for use;

- (d) the adequacy and performance of the available visual and non-visual ground aids;
- (e) the equipment available in the aircraft for the purpose of navigation or control of the flight path, as appropriate, during the take-off, approach, flare, landing or missed approach;
- (f) the obstacles in the approach and missed approach areas and the climb-out areas and necessary clearance;
- (g) the obstacle clearance altitude or height for the instrument approach procedures;
- (h) the means to determine and report meteorological conditions; and
- (i) the availability and adequacy of emergency services.

(4) A pilot may not conduct operations in weather conditions lower than the aerodrome operating minima provided for in Document NAM-CATS-OPS 91, unless approved by the Executive Director to do so.

(5) The Executive Director may authorise operational credits for operations with advanced aircraft.

(6) The Executive Director may, if the operational credit referred to in subregulation (5) relates to low visibility operations, issue a specific approval and such authorisations may not affect the classification of the instrument approach procedure.

(7) The Executive Director must when issuing a specific approval for the operational credit ensure that the –

- (a) aircraft meets the appropriate airworthiness certification requirements;
- (b) information necessary to support effective crew tasks for the operation is appropriately available to both pilots, if the number of flight crew members specified in the operations manual (or other documents associated with the certificate of airworthiness) is more than one;
- (c) owner or operator of the aircraft has carried out a safety risk assessment of the operations supported by the equipment;
- (d) owner or operator of the aircraft has established and documented normal and abnormal procedures and MEL;
- (e) owner or operator of the aircraft has established a training programme for the flight crew members and relevant personnel involved in the flight preparation;
- (f) owner or operator of the aircraft has established a system for data collection, evaluation and trend monitoring for low visibility operations for which there is an operational credit; and
- (g) owner or operator of the aircraft has instituted appropriate procedures with respect to continuing airworthiness, maintenance and repair practices and programmes.

(8) The State of Registry must establish criteria for the safe operation of the aircraft for operations with operational credit with minima above those related to low visibility operations.

(9) The Executive Director must establish criteria for the safe operation of the aircraft for operations with operational credit with minima above those related to low visibility operations.

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

- (a) type A: a minimum descent height or decision height at or above 75 metre (250 feet); and
- (b) type B: a decision height below 75 metres (250 feet) and Type B instrument approach operations are categorized as:
 - (i) Category I (CAT I): a decision height not lower than 60 metres (200 feet) and with either a visibility not less than 800 metres or a runway visual range not less than 550 metre;
 - (ii) Category II (CAT II): a decision height lower than 60 metre (200 feet) but not lower than 30 metres (100 feet) and a runway visual range not less than 300 metres;
 - (iii) Category III (CAT III): a decision height lower than 30 metre (100 feet) or no decision height and a runway visual range less than 300 metres or no runway visual range limitations.

(11) The operating minima for 2D instrument approach operations using instrument approach procedures must be determined by establishing a minimum descent altitude or minimum descent height, minimum visibility and, if necessary, cloud conditions.

(12) The operating minima for 3D instrument approach operations using instrument approach procedures must be determined by establishing a decision altitude or decision height and the minimum visibility or runway visual range.

(13) The Executive Director must issue a specific approval for instrument approach operations in low visibility which must only be conducted if runway visual range information is provided.

(14) The Executive Director may, for take-off in low visibility, issue a specific approval for the minimum take-off runway visual range.

Threshold crossing height

91.07.6 The pilot-in-command of an aircraft being used to conduct an instrument approach, must ensure that the aircraft crosses the threshold by a safe margin and in the required landing configuration and altitude.

Pre-flight selection of aerodromes

91.07.7 (1) The owner or operator of an aircraft must select the destination or alternate aerodromes contemplated in regulation 91.07.5 when planning a flight.

(2) The owner or operator must select a departure, destination or alternate aerodrome only when the service ability status of the aerodrome permits safe operation of the type of aircraft concerned.

(3) A take-off alternate aerodrome must be selected and specified in the operational and ATS flight plan, as contemplated in 91.06.23, if the meteorological 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) The take-off alternate aerodrome referred to in subregulation (3), must be located within the following time from the aerodrome of departure –

- (a) 45 minutes flying time from the departure aerodrome in the case of single-engine aeroplanes;
- (b) for aircraft with two engines, one hour of flight time at a one-engine-inoperative cruising speed, determined from the aircraft flight manual referred to in regulation 91.03.2, calculated in International Standard Atmosphere and still-air conditions using the actual take-off mass;
- (c) for aeroplanes with three or more engines, two hours of flight time at an all-engine cruising speed, determined from the aircraft flight manual, calculated in international standards atmosphere and still-air conditions using the actual take-off mass;
- (d) for aeroplanes engaged in extended diversion time operations where an alternate aerodrome meeting the distance criteria of subregulation (4) (b) or (c) is not available, the first available alternate aerodrome located within the distance of the operator's approved maximum diversion time considering the actual take-off mass;
- (e) for an aerodrome to be selected as a take-off alternate the available information must indicate that, at the estimated time of use, the conditions will be at or above the operator's established aerodrome operating minima for that operation; and
- (f) en-route alternate aerodromes, required by paragraph (d) for extended diversion time operations by aircraft with two turbine engines, must be selected and specified in the air traffic services flight plan,

except that if the aircraft flight manual referred to in regulation 91.03.2 does not contain a one-engine inoperative cruising speed as referred to in subparagraphs (b) and (c), the speed to be used for calculation must be the speed which is achieved with the remaining engine or engines set at maximum continuous power.

(5) The owner or operator of a helicopter must select at least one destination alternate aerodrome for each IFR flight, unless the meteorological conditions prevailing are such that, for the period from one hour before and until one hour after the expected time of arrival at the destination aerodrome, the approach from the minimum sector safe altitude and landing can be made in VMC.

(6) The owner or operator of an aircraft must for a flight to be conducted in accordance with IFR, select at least one destination alternate aerodrome which must be specified in the ATS flight plan, unless –

- (a) the duration of the flight from the departure aerodrome or from the point of in-flight re-planning to the destination aerodrome is such that, taking into account all meteorological conditions and operational information relevant to the flight, at the estimated time of use, a reasonable certainty exists that –
 - (i) the approach and landing may be made under visual meteorological conditions; and

- (ii) separate runways are usable at the estimated time of use of the destination aerodrome with at least one runway having an operational instrument approach procedure;
- (b) the aerodrome is isolated and operations into isolated aerodromes do not require the selection of a destination alternate aerodromes, planned as contemplated in Document NAM-CATS-OPS 91 and –
 - (i) for each flight into an isolated aerodrome a point of no return must be determined; and
 - (ii) a flight to be conducted to an isolated aerodrome may not be continued past the point of no return unless a current assessment of meteorological conditions, traffic and other operational conditions indicate that a safe landing can be made at the estimated time of use.
- (7) Except as provided in subregulations (10) and (13), the owner or operator of an aircraft must when planning a flight, only select an aerodrome as a destination or alternate aerodrome if the appropriate weather reports or forecasts or a combination of such weather report or forecast, are at or above the applicable planning minima for a period of one hour before to one hour after the estimated time of arrival of the aircraft at the aerodrome.
- (8) The owner or operator of a helicopter must select at least one destination alternate aerodrome for each IFR flight unless –
 - (a) 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 or from the actual time of departure to two hours after the estimated time of arrival, whichever is the shorter period –
 - (i) a cloud base of at least 400 feet above the minimum associated with the instrument approach procedure; and
 - (ii) visibility of at least 1.5 kilometre more than the minimum associated with the procedure; or
 - (b) the heliport of intended landing is isolated, and no suitable alternate heliport is available and –
 - (i) an instrument approach procedure is provided for the isolated heliport of intended landing; and
 - (ii) a point of no return is determined in case of an offshore destination.
- (9) Suitable offshore alternates for helicopters may be specified subject to the following –
 - (a) the offshore alternates must be used only after passing a point of no return or prior to a point of no return, onshore alternates must be used;
 - (b) mechanical reliability of critical control systems and critical components is considered and taken into account when determining the suitability of the alternate;
 - (c) one-engine inoperative performance capability must be attainable prior to arrival at the offshore alternate;

- (d) to the extent possible, deck availability must be guaranteed; and
 - (e) weather information must be reliable and accurate.
- (10) An owner or operator of an aircraft must for two destination alternate aerodromes select and specify in the operational and ATS flight plans, if at the destination aerodrome –
- (a) meteorological conditions at the estimated time of use will be below the operator's established aerodrome operating minima for that operator; or
 - (b) meteorological information is not available.
- (11) The owner or operator of an aircraft must, in the ATS flight plan referred to in regulation 91.06.23, specify the destination alternate aerodrome if required.
- (12) The owner or operator of an aircraft must, in the ATS flight plan referred to in regulation 91.06.23, specify enroute alternate aerodromes for extended-range operations with a twin-engine aeroplanes.
- (13) In addition to subregulation (10) an owner or operator of an aircraft may conduct a flight in accordance with IFR to a destination for which there is no aviation weather report or forecast available, as long as the requirements specified in Document NAM-CATS-OPS 91 are met.
- (14) Despite subregulations(3), (6) and (8) the Executive Director may, based on the results of a specific safety risk assessment conducted by the owner or operator of an aircraft which demonstrates how an equivalent level of safety will be maintained approve operational variations to alternate aerodrome selection criteria.
- (15) The specific safety risk assessment referred to in subregulation (14) must include at least the –
- (a) capabilities of the pilot-in-command or operator;
 - (b) overall capability of the aircraft and its systems;
 - (c) available aerodrome technologies, capabilities and infrastructure;
 - (d) quality and reliability of meteorological information;
 - (e) identified hazards and safety risks associated with each alternate aerodrome variation; and
 - (f) specific mitigation measures.

Planning minima for IFR flights

91.07.8 (1) The owner or operator of an aircraft may not select an aerodrome as a take-off alternate aerodrome for a flight to be conducted, wholly or partly in accordance with IFR under instrument meteorological conditions unless the appropriate weather reports or forecasts or any combination of such weather or forecast, indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the applicable landing minima provided for in regulation 91.07.5.

(2) The ceiling of the aircraft must be taken into account when the only approaches available are non-precision or circling approaches.

(3) Any limitation related to one-engine inoperative operations must be taken into account.

(4) Except as provided for in regulation 91.07.7(13), the owner or operator of an aircraft may only select the destination aerodrome or destination alternate aerodrome, if required, if the appropriate weather reports or forecasts or any combination of such weather reports or forecast, indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at, or above, the applicable planning minima.

(5) The applicable planning minima referred to in subregulation (4) must be as follows –

(a) planning minima for a destination aerodrome –

(i) runway visual range or visibility specified in regulation 91.07.5; and

(ii) for non-precision approach or a circling approach, the ceiling at, or above, minimum descent altitude or minimum descent height; and

(b) planning minima for a destination alternate aerodrome must be as provided for in Document NAM-CATS-OPS 91.

(6) The owner or operator of an aircraft may not select an aerodrome as an en route alternate aerodrome unless the appropriate weather reports or forecasts or any combination of such weather reports or forecast, indicate that during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the planning minima as provided for in Document NAM-CATS-OPS 91.

Meteorological conditions

91.07.9 (1) A pilot may not, on a flight conducted in accordance with VFR, commence take-off unless current meteorological reports or a combination of current reports and forecasts, indicate that the meteorological conditions along the route or that part of the route to be flown under VFR will, at the appropriate time, be such as to enable compliance with this Part.

(2) A pilot conducting a flight in accordance with IFR –

(a) may not take off from the departure aerodrome unless meteorological conditions, at the time of use, are at or above the operator's established aerodrome operating minima for that operator; and

(b) may not take off or continue beyond the point of in-flight re-planning unless at the aerodrome of intended landing or at each alternate aerodrome to be selected in compliance with regulation 91.07.7, current meteorological reports or a combination of current reports and forecasts, indicate that the meteorological conditions will be, at the estimated time of use, at or above the operator's established aerodrome operating minima for that operation.

(3) In the case of commercial air transport operations, to ensure that adequate margin of safety is observed in determining whether or not an approach and landing can be safely carried out at each alternate aerodrome, the operator must specify appropriate incremental values, acceptable to the Executive Director, for height of cloud base and visibility to be added to the operator's established aerodrome operating minima for the estimated time of use of the aerodrome.

VFR operating minima

91.07.10 The owner or operator of an aircraft must ensure that –

- (a) VFR flights are conducted in accordance with the VFR provided for in Subpart 6; and
- (b) special VFR flights are not commenced when the visibility is less than the visibility provided for in regulation 91.06.32(1).

Mass and balance

91.07.11 (1) The owner or operator of an aircraft must ensure that, during any phase of the operation, the loading, mass and the centre of gravity of the aircraft complies with the limitations specified in the approved aircraft flight manual referred to in regulation 91.03.2 or the operations manual referred to in regulation 91.03.7 if the limitations in such manual are more restrictive.

(2) The owner or operator of an aircraft must establish the mass and the centre of gravity of the aircraft by actual weighing prior to initial entry into operation and thereafter at intervals of five years.

(3) The accumulated effects of modifications and repairs on the mass and balance of the aircraft, must be accounted for and properly documented by the owner or operator of the aircraft.

(4) The aircraft must be weighed in accordance with the provisions of subregulation (2), if the effect of modifications on the mass and balance is not accurately known.

(5) The owner or operator of an aircraft must determine the mass of all operating items and flight crew members included in the dry operating mass of the aircraft, by weighing or by using the appropriate standard mass as provided for in Document NAM-CATS-OPS 91.

(6) The owner or operator of an aircraft must determine the influence of the mass of the operating items and flight crew members referred to in subregulation (5) on the centre of gravity of the aircraft.

(7) The owner or operator of an aircraft must establish the mass of the traffic load, including any ballast, by actual weighing or determine the mass of the traffic load in accordance with the appropriate standard passenger and baggage mass as provided for in Document NAM-CATS-OPS 91.

(8) The owner or operator of an aircraft must determine the mass of the fuel load by using the actual specific gravity or, if approved by the Executive Director, a standard specific gravity.

Fuel and oil requirements

91.07.12 (1) A pilot-in-command of an aircraft may not commence a flight unless he or she is satisfied that the aircraft is carrying a sufficient amount of usable fuel, to complete the planned flight safely and to allow for deviations from the planned operation.

(2) The pilot-in-command must advise ATC of a minimum fuel state by declaring minimum fuel when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome or other air traffic delays, may result in landing with less than the planned final reserve fuel.

(3) The pilot-in-command may declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL, if the calculated usable fuel estimated to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

(4) The fuel policy, including calculation of the amount of fuel and oil to be carried by an aircraft must be as provided for in NAM-CATS-OPS 91.

Refuelling or defueling with passengers on board

91.07.13 (1) The owner or operator of an aircraft must ensure that the aircraft is not refuelled or defueled with aviation gasoline or wide-cut type fuel when passengers are embarking, on board or disembarking such aircraft.

(2) In cases other than the cases referred to in subregulation (1), necessary precautions must be taken and the aircraft must be properly manned by qualified personnel ready to initiate and direct an evacuation of such aircraft by the most practical and expeditious means available.

Smoking in aircraft

91.07.14 (1) A person may not smoke in a Namibian registered aircraft or in any foreign registered aircraft when flying in or over Namibia.

(2) In all Namibian registered aircraft, notices must be displayed in a prominent place in the aircraft indicating that smoking is prohibited and that such notices are clearly visible to all passengers and flight crew members.

Instrument approach and departure procedures

91.07.15 (1) The owner or operator of an aircraft must ensure that the instrument approach and departure procedures, established by the appropriate authority of the state in which the aerodrome to be used, is located, are used.

(2) Despite subregulation (1), a pilot-in-command may accept an air traffic control clearance to deviate from a published approach or departure route, as long as –

- (a) obstacle clearance criteria are observed, and full account is taken of the operating conditions; and
- (b) the final approach is flown visually.

(3) The owner or operator of an aircraft must ensure that the appropriate temperature corrections to all published altitudes are applied when conducting approaches at an aerodrome in temperatures below standard.

(4) One or more instrument approach procedures designed to support instrument approach operations must be approved and promulgated by the state in which the aerodrome is located to serve each instrument runway or aerodrome utilised for instrument flight operations.

(5) An aircraft operated in accordance with the instrument flight rules must comply with the instrument approach procedures approved by the state in which the aerodrome is located.

Noise abatement and noise certification

91.07.16 (1) The pilot-in-command must take into account published noise abatement procedures to minimise the effect of aircraft noise while ensuring that safety has priority over noise abatement.

(2) The pilot-in-command, owner or operator of an aircraft must insure that such aircraft is carrying a document attesting noise certification where applicable.

Submission of ATS flight plan

91.07.17 The owner or operator of an aircraft must ensure that a flight is not commenced unless an ATS flight plan has been filed or adequate information has been deposited in order to permit alerting services to be activated, if required.

Seats, safety belts and harness

91.07.18 (1) The pilot-in-command must, before take-off and landing, and whenever considered necessary in the interests of aviation safety, ensure that each person on board such aircraft occupies a seat or berth with his or her safety belt or harness, where provided, properly secured except as provided for in regulation 91.04.11.

(2) Despite subregulation (1), a person may use the floor of the aircraft as a seat, if that person is on board for the purpose of parachuting.

(3) Despite subregulation (2) a person may operate an aircraft without a seat belt for a person, if that person is on board for the purpose of parachuting and has an alternative means of securing that person during take-off and landing.

(4) A seat for any cabin crew member must, if possible, be located near a floor-level emergency exit and any additional cabin crew member seat required must be located such that a cabin crew member may best be able to assist any passenger in the event of an emergency evacuation, but such a seat must be forward or rearward facing within 15° of the longitudinal axis of an aircraft.

(5) If a pilot-in-command cannot see all the passenger seats in an aircraft from his or her own seat, a means of indicating to all passengers and cabin crew members that seat belts should be fastened, must be installed.

(6) A safety harness and safety belt must have a single point release.

(7) A passenger may not be allowed to be responsible for the safety of more than one infant on board an aircraft.

Passenger seating

91.07.19 (1) The owner or operator of an aircraft must ensure that passengers are seated where, if an emergency evacuation is required, such passengers may best assist and not hinder evacuation from the aircraft.

(2) The owner or operator of an aircraft must ensure that if a disabled passenger is carried together with other passengers, such passenger may not be positioned in such a way that access to emergency exits is blocked.

(3) Passengers may be carried in an aircraft, other than an air ambulance aircraft operated and equipped in terms of regulations relating to aircraft engaged in air ambulance operations, on

a stretcher only if such stretcher and the manner in which it is secured to the aircraft have been approved by the Executive Director and the condition of the passenger does not require the attention of an aviation health care provider or require the passenger to be connected to any external medical equipment.

(4) In the case of an emergency medical situation, where no air ambulance aircraft operated and equipped in terms of regulations relating to aircraft engaged in air ambulance operations can be made available within a reasonable time span at or near the place where the situation exists, an aircraft owner or operator may disregard subregulation (1), (2) and (3) in the interest of saving human life.

(5) If an owner or operator uses an aircraft as a non-standard emergency transport in terms of subregulation (4), such operator must, within 14 days of the flight having taken place report such an incidence to the Executive Director on the appropriate form as provided for by the Executive Director, explaining the reasons for the deviation from this regulation.

(6) The pilot-in-command must ensure that multiple occupancy of aircraft seats does not occur other than by one adult and one infant who is properly secured by a child restraint device.

Passenger movements and briefing

91.07.20 (1) The owner or operator of an aircraft must take reasonable steps to provide for the safe movement of his or her passengers to or from the aircraft while on the aerodrome movement area.

- (2) The owner or operator of an aircraft must ensure that –
 - (a) passengers are verbally briefed about safety matters, parts or all of which may be given by an audio-visual presentation; and
 - (b) in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.

Passenger health and safety

91.07.21 (1) The pilot-in-command of an aircraft must notify air traffic control if it appears that a person displays the signs and symptoms of a communicable disease as provided for in Document NAM-CATS-OPS 91.

- (2) The owner or operator of an aircraft must establish procedures for –
 - (a) evaluation by flight crew member or cabin crew member of a person who displays the signs and symptoms referred to in subregulation (1); and
 - (b) the notification of the air traffic control by the pilot-in-command of a suspected case as provided for in Document NAM-CATS-OPS 91.

Emergency equipment

91.07.22 (1) The owner or operator of an aircraft must ensure that emergency equipment, carried or installed in the aircraft to meet the requirements provided for in this Part and the MEL, is in such condition that it will satisfactorily perform its design function.

(2) The pilot-in-command of the aircraft must ensure that the emergency equipment referred to in subregulation (1) remains easily accessible for immediate use by the flight crew.

Illumination of emergency exits

91.07.23 If an aircraft, which is equipped with an emergency lighting system is in flight and below 1 000 feet above ground level or on the ground with passengers on board –

- (a) the emergency lighting system must be switched on; or
- (b) the normal cabin lighting system must be switched on and the emergency lighting must be armed.

Use of supplemental oxygen

91.07.24 (1) The pilot-in-command of an aircraft must ensure that flight crew members engaged in performing duties essential to the safe operation of an aircraft in flight, use supplemental oxygen –

- (a) continuously when the flight deck pressure altitude exceeds 10 000 feet for longer than 120 consecutive minutes flight time; and
- (b) at all times when the flight deck pressure altitude exceeds 12 000 feet.

Approach and landing conditions

91.07.25 (1) A pilot-in-command of an aircraft must before commencing an approach to land, be satisfied that, according to the information available, the weather and the condition of the touch-down and runway area at an aerodrome intended to be used, a safe approach, landing or missed approach can be executed having regard to the performance information specified in the aircraft flight manual or similar document of the aircraft.

(2) An approach to land may not be continued below 1 000 feet above aerodrome elevation, unless a pilot-in-command, based on the information available, is satisfied that –

- (a) a runway surface condition permits a safe landing; and
- (b) an aircraft performance information indicates that a safe landing can be made.

Approach ban

91.07.26 (1) An approach to land may not be continued below 300 metre (1 000 feet) above aerodrome elevation unless the pilot-in-command is satisfied that, with the runway surface condition information available, the aircraft performance information indicates that a safe landing can be made.

(2) If, after passing 1000 feet above an aerodrome elevation in accordance with subregulation (1), a reported runway visual range or visibility falls below the applicable minimum, a pilot may continue with an approach to decision altitude or decision height or minimum descent altitude or minimum descent height.

(3) A pilot may continue with an approach below altitude or decision height or minimum descent altitude or minimum descent height and complete a landing, provided that the required visual reference is established at an altitude or decision height or minimum descent altitude or minimum descent height is maintained.

In-flight testing on passenger- and cargo-carrying flights

91.07.27 The owner or operator of an aircraft, when passengers or cargo are on board such aircraft, must ensure that a person does not –

- (a) simulate emergency situations in the aircraft affecting the flight characteristics of such aircraft;
- (b) conduct flight testing for the initial skills test or renewal of an instrument rating;
- (c) conduct any flight or skills test other than a route proficiency test; or
- (d) conduct any skills test for a class or type rating.

Turning helicopter rotors

91.07.28 (1) A person engaged in helicopter operations may not, except as provided for in subregulation (2), permit helicopter rotors to be turned under power without a qualified pilot at the controls of such helicopter.

(2) A licensed AME, who has undergone instruction from a qualified Grade II or higher qualified helicopter flight instructor on the ground-running of the relevant helicopter type, and thereafter has been certified as competent to undertake such a task by the instructor in AME's record of experience, may turn helicopter rotors under power for the purposes of blade tracking on condition that –

- (a) the collective has been locked in the down position; and
- (b) ground-runs are carried out when the helicopter is stationary, and wind conditions do not require major cyclic inputs.

Starting and running of engines

91.07.29 (1) Except where the brakes are serviceable and are fully applied, chocks must be placed in front of the wheels of an aircraft before starting the engine or engines, and a competent person must be seated at the controls when the engine or engines are running.

(2) If the pilot of an aircraft is the only person present and it becomes necessary for chocks to be used, he or she must ensure that the chocks are removed prior to starting the engine, unless if the aircraft is equipped with a parking brake, in which case the parking brake must be set before the pilot removes the chocks.

(3) Except as contemplated in subregulation (2), when the engines are running, at least one pilot seat of an aircraft must be attended by a person qualified to occupy the pilot seat.

Acrobatic flights

91.07.30 (1) A aircraft may not be flown acrobatically, so as to avoid endangering air traffic.

(2) An aircraft may not be flown acrobatically, unless if individual permission has been obtained from the Executive Director, on condition that –

- (a) the manoeuvre can be concluded, and the aircraft brought on an even keel at a height of not less than 2 000 feet above the ground or water;

- (b) the aircraft is flown acrobatically within a five nautical mile distance of an aerodrome reference point of an aerodrome licensed and approved in terms of Part 139 unless the aircraft is flown at a height not less than 4 000 feet above ground level;
- (c) the aircraft is not flown in the vicinity of air traffic services routes; and
- (d) the aircraft is not flown over any populous area or public gathering.

Aerodrome approach and departure procedures

91.07.31 (1) When an instrument approach to, or instrument departure from, an aerodrome is necessary, the pilot-in-command of an aircraft must use the instrument approach and departure procedure as published by the Executive Director in the AIC, IAIP, IAIP Supplement or NOTAM or otherwise approved by the Executive Director.

(2) A person flying an aircraft may not execute or endeavour to execute an instrument approach or instrument departure at an aerodrome unless –

- (a) the provisions of regulation 91.06.33 are complied with;
- (b) the flight is conducted in accordance with procedures for instrument approach or instrument departure authorised by the Executive Director for the specific aerodrome and manoeuvre to be executed;
- (c) the requirements for flights conducted under instrument meteorological conditions authorised by the Executive Director are complied with; and
- (d) where applicable, has received a clearance for the approach from the relevant air traffic services unit.

(3) A pilot-in-command of an aircraft under IFR may not nominate an aerodrome as an alternate aerodrome unless –

- (a) there is a procedure for an instrument approach authorised by the Executive Director, if the forecast for the alternate aerodrome is instrument meteorological conditions;
- (b) the aircraft complies with the requirements of regulation 91.06.33; and
- (c) there is reasonable certainty that the requirements for flights conducted under instrument meteorological conditions will be complied with.

Aircraft operating procedures

91.07.32 The pilot-in-command of an aircraft must climb or descend to an assigned altitude or flight level at a rate less than 1 500 feet per minute throughout the last 1 000 feet of climb or descent to the assigned altitude or flight level, unless otherwise specified in an air traffic control instruction.

Head-up displays and vision systems

91.07.33 An owner or operator of an aircraft may only provide for the use of automatic landing systems, a head-up display or equivalent display, enhanced vision system, synthetic vision system, combined vision system, or any combination of those systems into a hybrid system for the safe operation of an aircraft, if –

- (a) such owner or operator has an approval to do so;
 - (b) such owner or operator complies with the requirements for automatic landing systems, a head-up display or equivalent display, enhanced vision system, synthetic vision system, combined vision system, as applicable, as provided for in Document NAM-CATS-OPS 91;
 - (c) such equipment meets the appropriate airworthiness certification requirements;
 - (d) such owner or operator has carried out a safety risk assessment of the operations supported by the automatic landing systems, a head-up display or equivalent display, enhanced vision system, synthetic vision system, combined vision system;
 - (e) the Executive Director has authorised operational credit for such operations with an aircraft equipped with automatic landing systems, a head-up display or equivalent display, enhanced vision system, synthetic vision system, combined vision system;
 - (f) such owner or operator of an aircraft has acquired a specific approval, if operational credit relates to low visibility operations, provided that such specific approval must not affect the classification of the instrument approach procedure.
 - (g) information necessary to support effective crew tasks for the operation is appropriately available to both pilots where the number of flight crew members specified in the operations manual or other documents associated with the certificate of airworthiness is more than one;
 - (h) such owner or operator has established and documented normal and abnormal procedures and a MEL;
 - (i) such owner or operator has established a training programme for the flight crew members and relevant personnel involved in the flight preparation;
 - (j) such owner or operator has established a system for data collection, evaluation and trend monitoring for low visibility operations for which there is an operational credit; and
 - (k) such owner or operator has instituted appropriate procedures with respect to continuing airworthiness maintenance and repair practices and programmes.
- (2) An owner or an operator of an aircraft must include suitable operational procedures for use of, and training requirements for such equipment, which must cover at least the following:
- (a) equipment limitations;
 - (b) operational credits as specified in Document NAM-CATS-OPS 91;
 - (c) flight planning;
 - (d) ground and airborne operations;
 - (e) crew resource management;
 - (f) standard operating procedures; and
 - (g) ATS flight plans and communication.

Electronic flight bags

91.07.34 (1) If an electronic flight bag is used on board an aircraft, the pilot-in-command and an operator or owner of the aircraft must –

- (a) assess the safety risk associated with each electronic flight bag function;
- (b) establish procedures for the use of, and training requirements for, each electronic flight bag function;
- (c) ensure that, in the event of electronic flight bag failure, sufficient information is readily available to a flight crew for the flight to be conducted safely;
- (d) ensure that requirements are established for redundancy of information contained and displayed by the electronic flight bag functions, if appropriate;
- (e) ensure that electronic flight bag equipment and its associated installation hardware, including interaction with aircraft systems if applicable, meet the appropriate airworthiness certification requirements; and
- (f) establish and document procedures for the management of electronic flight bag function including any database it may use.

(2) If a portable electronic flight bag is used on board an aircraft, a pilot-in-command and an owner or operator of such aircraft must ensure that such electronic flight bag does not affect the performance of aircraft systems, equipment or the ability to operate the aircraft.

Extended diversion time operation requirements

91.07.35 (1) An pilot-in-command or owner or operator conducting operations beyond 60 minutes, from a point on a route to an enroute alternate aerodrome must ensure that –

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

(2) An owner or operators of an aircraft must, in addition to subregulation (1)(a) provide the overall level of safety intended by the provisions of this Part and ensure that the following are taken into account –

- (c) the operational control and flight dispatch procedures;
- (d) the operating procedures; and
- (e) the training programmes.

(11) Unless the operation has been specifically approved by the Executive Director, an aeroplane with two or more turbine engines may not be operated on a route where diversion time from any point on the route, calculated in international standards atmosphere and still air conditions at the one-engine inoperative cruise speed for aeroplanes with two turbine engines and at the all-engine operating cruise speed for aeroplanes with more than two turbine engines, to an adequate enroute alternate aerodrome, exceeds a threshold time established for such operation.

(12) The maximum diversion time, for an operator of a particular aircraft type engaged in extended diversion time operations must be approved by the Executive Director.

(13) The Executive Director must, when approving the appropriate maximum diversion time for an owner or operator for a particular aeroplane type engaged in extended diversion time operation, be satisfied that –

- (a) for all aeroplanes, the maximum diversion time may not exceed the value of the extended diversion time operation significant system time limitation, if any, indicated in the aircraft flight manual directly or by reference, reduced by an operational safety margin of 15 minutes; and
- (b) for an aeroplane with two turbine engines, the aeroplane is extended diversion time operation certified.

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

(15) The specific safety risk assessment referred to in subregulation (6) must include at least the –

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

(16) For aeroplanes engaged in extended diversion time operation must for the additional fuel required under regulation 91.07.12 (4) include the fuel necessary to comply with the extended diversion time operation critical fuel scenario as established by the Executive Director.

(17) The pilot-in-command or owner or operator of aircraft may not proceed with a flight beyond the threshold time in accordance with subregulation (3), unless the identified enroute alternate aerodromes have been re-evaluated for availability and the most up to date information indicates that, during the estimated time of use, conditions at those aerodromes will be at or above the operator's established aerodrome operating minima for the operation and if any conditions is identified that would preclude a safe approach and landing at that aerodrome during the estimated time of use, an alternative course of action must be determined.

(18) The Executive Director must, when approving maximum diversion times for aeroplanes with two turbine engines, ensure that the following are taken into account in providing the overall level of safety intended –

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

Disinfection of aircraft

91.07.36 (1) The Executive Director must, in consultation with public health authorities, establish and determine, based on a risk assessment, procedures providing for the conditions under which an aircraft is disinfected.

(2) An owner or operator of an aircraft must, in consultation with the Ministry responsible for Health and the Authority, establish procedures and conditions under which an aircraft must be disinfected.

Operations in required navigation performance designated airspace

91.07.37 A person may not operate an aircraft in required navigation performance designated airspace unless –

- (a) an required navigation performance operations procedures manual is available and is incorporating all amendments, approved in accordance with this Part for that aircraft and aircraft navigation system;
- (b) such operation is performed in accordance with procedures, instructions and limitations contained in an approved manual;
- (c) the instruments and equipment required by Document NAM-CATS 91 for a particular required navigation performance operation have been inspected and maintained in accordance with an approved maintenance program;
- (d) each flight crew member has adequate knowledge of, and is familiar with the aircraft concerned and –
 - (i) its navigation system; and
 - (ii) procedures to be used, including normal, abnormal and contingency procedures; and
- (e) the pilot-in-command has ensured that such aircraft and its navigation system are both approved by the Executive Director for required navigation performance operation and that an required navigation performance operation procedures manual is complied with for a planned route and any alternate routes.

Repatriation and relief flight

91.07.38 (1) The Executive Director must, in consultation with the Ministry, Ministry responsible for health and other relevant authorities, establish a policy or procedures to facilitate relief and repatriation flights.

(2) The Executive Director must, in consultation with the Ministry, Ministry of responsible for home affairs and immigration and other relevant authorities –

- (a) facilitate the entry, departure and transit of aircraft engaged in repatriation and relief flight; and
 - (b) take all possible measures to ensure the safe operation of repatriation and relief flight.
- (3) A repatriation and relief flight may commence as soon as possible after reaching agreement with the states involved.
- (4) The Authority must, after consultation with a holder of an aerodrome licence and other relevant stakeholders, ensure that personnel and carry-on baggage, hold baggage, cargo, and other goods arriving on repatriation and relief flight are cleared without delay.
- (5) An owner or operator of an aircraft must ensure that human remains infected with a communicable disease are transported according to the requirements stipulated in Annex 9 to the Convention and the applicable Ministry responsible for health and social services medical protocols.
- (6) An owner or operator of an aircraft must expedite clearance processes for entry or departure and transit of an aircraft, passengers, cargo, and other goods involved in repatriation and relief flight.

Security Programme

91.07.39 An owner or operator with an aircraft greater than 5700 kilogram must establish and maintain a requirement in its training programme, to acquaint appropriate employees with preventive measures and techniques in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on an aircraft so that they contribute to the prevention of acts of sabotage or other forms of unlawful interference.

Low visibility operations

91.07.40 An owner or operator of an aircraft may not assign a pilot to conduct a low visibility take-off or Category II or III approach unless –

- (a) such an owner or operator has a specific approval issued by the Executive Director;
- (b) an LVO is conducted in accordance with procedures approved in its operations manual;
- (c) instrument approach operations in low visibility may only be conducted if runway visual range information is provided; and
- (d) minimum take-off runway visual range must be approved in its operations manual.

Minimum equipment list

91.07.41 (1) A person may not conduct a take-off in an aircraft with instruments or equipment that are not serviceable or that have been removed unless –

- (a) the aircraft is operated in accordance with a configuration deviation list;
- (b) the provisions specified in the aircraft flight manual ; or
- (c) the conditions or limitations specified in a MEL, which has been approved by the Executive Director, and in the opinion of the pilot-in-command aviation safety will not be compromised.

(2) An owner or operator of an aircraft must establish an MEL for each type of aircraft for which an MEL has been approved by a state of design of such an aircraft, provided such state is a contracting state.

(3) An operator may not operate an aircraft in accordance with an MEL unless such MEL is carried on board of an aircraft .

Landing on roads

91.07.42 A person may not use a public road as a place of landing or take-off in an aircraft, except –

- (a) in the case of an emergency involving the safety of the aircraft or its occupants;
- (b) for the purpose of saving human lives; or
- (c) when involved in civil defence or law-enforcement operations, provided that at all times reasonable care is taken for the safety of others with due regard to the prevailing circumstances.

Pilot-in-command picking up objects

91.07.43 The pilot-in-command of an aircraft in flight may not permit objects to be picked up except with the prior written approval of the Executive Director.

Operation of vehicle- or vessel-towed aircraft

91.07.44 (1) Except if prior written approval is obtained from the Executive Director and subject to such conditions as the Executive Director may impose, an aircraft which is intended, for flight purposes, to be towed by a vehicle or vessel travelling on the surface or to be moored on the surface, may not–

- (a) be flown higher than 150 feet above the surface on which the towing vehicle or vessel is travelling or to which such aircraft is moored;
- (b) be flown closer than five nautical miles from the boundary of an aerodrome; or
- (c) take-off from, land on or be flown above any public road.

(2) The provisions of subregulation (1)(a) and (b) do not apply to the winching or towing of gliders at the aerodrome of departure.

Following line features

91.07.45 An aircraft flying at or below 1 500 feet above the surface and following a power line, a road, a railway line, a river, a coastline or any other line feature within one nautical mile of such line feature, must be flown to the right of such line, road, railway line, river, coastline or other line feature, except when the aircraft is instructed to do otherwise by an air traffic service unit .

Aircraft speed

91.07.46 (1) Unless otherwise authorised by the Executive Director a person may not, fly an aircraft at an indicated air speed of more than 250 knots outside controlled airspace and below flight level 100.

(2) A person may not fly an aircraft within a control zone or an aerodrome traffic zone at an indicated air speed of more than 200 knots, unless if otherwise authorised or required by an air traffic service unit, provided that if the minimum safe indicated air speed for a particular flight is greater than the maximum indicated air speed provided for in this regulation, the aircraft may be flown at the minimum safe indicated air speed.

SUBPART 8

PERFORMANCE OPERATING LIMITATIONS

General provisions

91.08.1 (1) The owner or operator of an aircraft must ensure that, under all conditions that could reasonably be expected to be encountered, the aircraft is operated in compliance with –

- (a) the terms and conditions of the certificate of airworthiness and within the approved operating limitations contained in the aircraft flight manual issued in respect of such aircraft;
- (b) the operating limitations, the markings and placards as provided for by the appropriate authority of the State of Registry; and
- (c) the mass limitations provided for in Part 21 or as imposed by compliance with the applicable noise certification standards under which the aircraft was certified unless otherwise authorised in exceptional circumstances by the competent authority of the state in which the aerodrome is situated for a certain aerodrome or a runway where there is no noise disturbance problem.

(2) The owner or operator of an aircraft must take account of airframe configuration, environmental conditions and the operation of systems which may have an effect on the performance of the aircraft, when appropriate, including aircraft mass, operating procedures, the pressure altitude appropriate to the elevation of the aerodrome, temperature, wind, runway gradient and condition of runway.

(3) Placards and instrument markings, containing those operating limitations required by the type certificate or under regulation 183.00.3 to be visible to the flight crew, must be displayed in the aircraft.

(4) The pilot-in-command must determine whether the aircraft performance will permit the take-off and departure to be carried out safely.

Helicopter operating limitations

91.08.2 (1) Performance Class 3 helicopters may only be operated in conditions of weather and light, and over such routes and diversions from such routes, which may permit a safe forced landing to be executed in the event of an engine failure.

(2) The provisions of subregulation 1 apply to Performance Class 2 helicopters prior to the take-off decision point or after passing the landing decision point.

(3) Performance Class 1 helicopters may be operated from elevated heliports in built-up urban areas.

Helicopter performance classification

91.08.3 For performance purposes, helicopters are classified as follows –

- (a) Class 1 helicopter- is a helicopter with performance such that, in case of critical power unit failure, the helicopter is able to safely continue the flight to an appropriate landing, unless the failure occurs prior to reaching the take-off decision point or after passing the landing decision point, in which case the helicopter must be able to land within the rejected take-off or landing area;
- (b) Class 2 helicopter- is a helicopter with performance such that, in case of critical power unit failure, the helicopter is able to safely continue the flight, except when the failure occurs early during the take-off manoeuvre or late in the landing manoeuvre, in which case a forced landing may be required; and
- (c) Class 3 helicopter- is a helicopter with performance such that, in case of power unit failure at any point in the flight profile, a forced landing has to be performed.

Aeroplane performance classification

91.08.4 For performance purposes, aeroplanes are classified as follows –

- (a) Class A aeroplanes –
 - (i) multi-engine aeroplanes powered by a turbo-propeller engines with a maximum certificated take-off mass exceeding 5 700 kilograms; and
 - (ii) multi-engine turbojet-powered aeroplanes;
- (b) Class B aeroplanes- propeller-driven aeroplanes, other than single-engine aeroplanes, with a MCM of 5700 kilograms or less;
- (c) Class C aeroplanes- aeroplanes powered by two or more reciprocating engines with a maximum certificated take-off mass exceeding 5700 kilograms; and
- (d) Class D aeroplanes- single-engine aeroplanes.

Performance limitations Class A and Class C aeroplanes

91.08.5 (1) A owner or operator of a Class A or C aeroplane may not start a take-off unless the aeroplane is 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 either the accelerate-stop distance available or the runway available or to continue the take-off and clear all obstacles along the flight path by an adequate margin until the aeroplane is in a position to safely transition to the enroute phase of flight.

(2) The adequate margin referred to in subregulation (1) must be determined as provided for in Document NAM-CATS-OPS 91.

(3) For the purposes of subregulation (1), the pilot-in-command must in determining the length of the runway available consider the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.

(4) A owner or operator of a Class A or C aeroplane may not operate such aeroplane unless it is able, in the event of the critical engine becoming inoperative at any point along the route or planned diversions from such route, to continue the flight to an aerodrome at which the requirements of subregulation (5) can be met, without flying below the minimum obstacle clearance altitude at any point.

(5) A owner or operator of a Class A or C aeroplane may not operate such aeroplane unless it is able, at the aerodrome of intended landing and at any alternate aerodrome, after clearing all obstacles in the approach path by a safe margin, be able to land, with assurance that it can come to a stop or, for a seaplane, to a satisfactorily low speed, within the landing distance available and allow for expected variations in the approach and landing techniques, if such allowance was not made during the establishment of the aeroplane's performance data.

(6) An owner or operator of an aeroplane may, in meeting the requirements of subregulations (4) and (5), allow for normal fuel consumption and if applicable, the ability to jettison fuel en route.

(7) An owner or operator of aeroplanes without approved performance data may submit an alternative means of meeting the requirements of subregulations (1), (4) and (5) to the Executive Director for approval.

SUBPART 9

AIRCRAFT CONTINUING AIRWORTHINESS

General

91.09.1 (1) A owner, operator or pilot of an aircraft may not operate the aircraft unless such aircraft is maintained and released to service in accordance with the provisions of Part 43 or Part 44, as applicable to the aircraft.

(2) An owner or operator of an aircraft may assign the maintenance and release of his or her aircraft to an approved maintenance organisation by means of a written agreement.

Owner's continuing airworthiness responsibilities

91.09.2 (1) The owner of an aircraft, or in the case where it is leased, the lessee, must ensure that, in accordance with procedures acceptable to the Executive Director –

- (a) the aircraft is maintained in an airworthy condition;
- (b) the operational and emergency equipment necessary for an intended flight is serviceable; and
- (c) the certificate of airworthiness of the aircraft remains valid.

(2) The owner or operator of an aircraft may not operate an aircraft unless maintenance on the aircraft, including any associated engine, propeller, and part, is carried out –

- (a) by an organisation complying with NAM-Cockpit Audio Recording System-OPS Part 145, that is either approved by the Executive Director or is approved by another contracting state to ICAO and is accepted by the Executive Director; or
- (b) by a person or organisation in accordance with procedures that are authorised by the Executive Director,

and there is a maintenance release in relation to the maintenance carried out.

(3) The owner or operator of an aircraft must ensure that the maintenance of the aircraft is performed in accordance with a maintenance programme acceptable to the Executive Director.

Continuing airworthiness records

91.09.3 (1) The owner or operator of an aircraft must ensure that the following records are kept for the periods mentioned in subregulation (2) –

- (a) the total time in service (hours, calendar time and cycles, as appropriate) of the aircraft and all life-limited components;
- (b) the current status of compliance with all applicable mandatory continuing airworthiness information;
- (c) appropriate details of modifications and repairs;
- (d) the time in service hours, calendar time and cycles, as appropriate since the last overhaul of the aircraft or its components subject to a mandatory overhaul life;
- (e) the current status of the aircraft's compliance with the maintenance programme; and
- (f) the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.

(2) The records in –

- (a) subregulation (1) (a) to (e) must be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service; and
- (b) subregulation (1) (f) must be kept for or a minimum period of one year after the signing of the maintenance release.

(3) If there is a –

- (a) temporary change of owner or operator, the records of such aircraft must be made available to the new owner or operator; or
- (b) permanent change of owner or operator, the records must be transferred to the new owner or operator.

(4) The records kept and transferred in accordance with this regulation must be maintained in a form and format that ensures readability, security, and integrity of the records at all times.

Modifications and repairs

91.09.4 (1) All modifications and repairs on an aircraft must comply with airworthiness requirements of Parts 43 and 44 acceptable to the Executive Director.

(2) The records of the modifications and repairs substantiating data approved design data supporting compliance with the airworthiness requirements must be retained as contemplated in regulation 43.03.3.

Maintenance release

91.09.5 (1) If maintenance is carried out by an approved maintenance organisation, the maintenance release must be issued by the approved maintenance organisation as contemplated in Part 145.

(2) If maintenance is not carried out by an approved maintenance organization, the maintenance release must be completed and signed by a person appropriately licenced in accordance with Part 66 to certify that the maintenance work performed has been completed satisfactorily and in accordance with data and procedures acceptable to the Executive Director.

(3) If maintenance is not carried out by an approved maintenance organisation, the maintenance release must include the following –

- (a) basic details of the maintenance performed;
- (b) the date such maintenance was completed; and
- (c) the identity of the authorised person or persons signing the release.

SUBPART 10

CARBON OFFSETTING REDUCTION SCHEME FOR INTERNATIONAL AVIATION

Applicability

91.10.1 (1) This Subpart applies to an owner or operator of an aircraft that –

- (a) is attributed to Namibia in accordance with regulation 91.10.2; and
- (b) produces annual CO₂ emissions greater than 10,000 tonnes from the use of an aircraft with a maximum certificated take-off mass greater than 5700 kilogram conducting international flights on or after 1 January 2019.

(2) This Subpart is not applicable to –

- (a) a humanitarian flight;
- (b) a medical flight;
- (c) a firefighting flight; and
- (d) a flight preceding or following a humanitarian, medical, or fire fighting flight, as provided for in Document NAM-CATS-OPS 91.

(3) The formulae and units, related to the carbon offsetting reduction scheme, are provided for in Document NAM-CATS-OPS 91.

Attribution of aircraft owner or operator to Namibia

91.10.2 (1) A owner or operator of aircraft with international flights must be identified and considered attributed to Namibia if the aircraft owner or operator –

- (a) has an ICAO designator;
- (b) has a valid air operator certificate, or equivalent, issued by the Executive Director; and
- (c) is registered as a juristic person or is a natural person with resident status in Namibia.

(2) If a owner or operator of an aircraft changes its attributes and is attributed to a new state but has not established a new entity or a subsidiary, the new state must become the state to which

the aircraft operator fulfils its requirements under this Subpart at the start of the next compliance period.

(3) A owner or operator of an aircraft and its wholly owned subsidiary aircraft operator may be treated as a single consolidated aircraft operator liable for compliance with the requirements of this subpart, subject to the approval of the Executive Director.

(4) An emissions monitoring plan of an aircraft operator with a wholly owned subsidiary aircraft owner or operator must be accompanied by documentary proof of ownership of that subsidiary aircraft operator.

Attribution of international flights to an aircraft operator

91.10.3 (1) A owner or operator of an aircraft must identify international flights that are attributed to it in terms of subregulation (2).

(2) An attribution of a specific international flight to a owner or operator of an aircraft must be determined as follows:

- (a) if the aircraft identification of a flight plan contains the ICAO Designator, that international flight must be attributed to the aircraft owner or operator that has been assigned this designator;
- (b) if the aircraft identification of a flight plan contains a nationality or common mark, and registration mark of an aircraft that is explicitly listed in an air operator certificate, a flight concerned must be attributed to the aircraft owner or operator that holds such air operator certificate; and
- (c) if an aircraft has not been identified in terms of subparagraph (a) or (b), an international flight must be attributed to an aircraft owner or operator who must be considered the aircraft operator.

(3) At owner or operator of an aircraft must, upon request by the Executive Director, provide information to identify an actual aircraft operator of a particular flight.

(4) A owner or operator of an aircraft may, by contract, delegate the administrative requirements of this Subpart to a third party, provided that a delegated third party is not the same entity as a verification body.

(5) Despite subregulation (4), liability for compliance may not be delegated and must remain with the aircraft operator in all situations.

Record keeping, compliance periods and equivalent procedure

91.10.4 (1) A owner or operator of an aircraft must keep records relevant to this Subpart for a period of 10 years.

(2) The Authority must keep records relevant to a aircraft owner or operator of an aircraft's CO₂ emissions per state pair in order to calculate the aircraft owner or operator's offsetting requirements during the 2030 to 2035 compliance periods.

(3) A owner or operator of an aircraft must comply with the compliance periods for carbon offsetting reduction scheme as provided for in Document NAM-CATS-OPS 91.

(4) If a owner or operator of an aircraft makes use of equivalent procedures, instead of the procedures provided for in this Subpart, such equivalent procedures may be approved by the

Executive Director if such equivalent procedures comply with the requirements in Document NAM-CATS-OPS 91.

Monitoring requirements of aircraft operator's annual CO₂ emissions

91.10.5 (1) The monitoring requirements of an aircraft operator's annual CO₂ emissions as provided for in Document NAM-CATS-OPS 91 must be applicable to an aircraft owner or operator of an aircraft from the year after it qualifies to be classified in terms of regulation 91.10.1.

(2) The monitoring requirements referred to in subregulation (1) must be applicable to a new entrant from the year after it meets the requirements referred to in regulation 91.10.1.

Eligibility of monitoring methods

91.10.6 (1) CO₂ emissions monitoring methods provided for in Document NAM-CATS-OPS 91 must be considered as eligible, if an aircraft owner or operator monitors and records its fuel use from international flights, in accordance with an eligible monitoring method provided for in subregulations (3) and (4).

(2) A owner or operator of an aircraft must use the same eligible monitoring method for the compliance period in accordance with an Emissions monitoring *plan* approved by the Executive Director.

(3) A owner or operator of an aircraft must comply with the compliance period provided for in Document NAM-CATS-OPS 91.

(4) The eligibility thresholds, for the use of an eligible monitoring method for the 2019 to 2020 compliance period and the 2021 to 2035 compliance period, must be as provided for in Document NAM-CATS-OPS 91.

Emissions monitoring plan

91.10.7 (1) A owner or operator of an aircraft must –

- (a) develop an emissions monitoring plan as provided for in Document NAM-CATS-OPS 91;
- (b) submit an emissions monitoring plan in the form and with the information and timelines as provided for in Document NAM-CATS-OPS 91, to the Executive Director for approval;
- (c) if it is a new entrant, submit an emissions monitoring plan to the Executive Director for approval within 90 days of falling within the scope of applicability; and
- (d) submit any material or substantial change on information contained in an emissions monitoring plan to the Executive Director for approval.

(2) A owner or operator of an aircraft must inform the Executive Director of any change to an emissions monitoring plan even if the aircraft operator does not consider such change to be a material change.

(3) The Executive Director must inform an aircraft owner or operator, during an approval process of an emissions monitoring plan, of a level of aggregation for which a reporting of number or flight and CO₂ emissions must be conducted.

Calculation of CO₂ emissions from aircraft fuel use

91.10.8 (1) A owner or operator of an aircraft must –

- (a) apply a fuel density value to calculate fuel mass where an amount of fuel uplift is determined in units of volume;
- (b) record fuel density which may be an actual or a standard value of 0.8 kilogram per litre that is used for operational and safety reasons such as in an operational, flight or technical log; and
- (c) detail a procedure for informing the use of actual or standard density in an emissions monitoring plan along with a reference to a relevant aircraft operator documentation.

(2) A owner or operator of an aircraft using a fuel use monitoring method must determine CO₂ emissions from international flights, using the following equation:

$$CO_2 = \sum_f M_f * FCF_f$$

Where:

CO_2 = CO₂ emissions (in tonnes);

M_f = Mass of fuel f used (in tonnes); and

FCF_f = Fuel conversion factor of given fuel f , equal to 3.16 (in kg CO₂/kg fuel) for Jet-A fuel and 3.10 (in kg CO₂/kg fuel) for AvGas or Jet-B fuel.

Monitoring of carbon offsetting reduction scheme eligible fuel claims

91.10.9 (1) A owner or operator of an aircraft intending to claim for emissions reduction from the use of carbon offsetting reduction scheme eligible fuel must –

- (a) use carbon offsetting reduction scheme eligible fuel that meets the carbon offsetting reduction scheme sustainability criteria as provided for in Document NAM-CATS-OPS 91; and
- (b) only use carbon offsetting reduction scheme eligible fuel from a fuel producer that is certified by an approved sustainability certification scheme as provided for in Document NAM-CATS-OPS 91.

(2) If a owner or operator of an aircraft fails to or cannot demonstrate that the fuel used by his or her aircraft meets the carbon offsetting reduction scheme sustainability criteria as provided for in Document NAM-CATS-OPS 91, such fuel may not be accounted for as carbon offsetting reduction scheme eligible fuel.

Reporting requirements for aircraft operator annual CO₂ emissions

91.10.10 (1) An aircraft owner or operator of an aircraft –

- (a) must submit to the Executive Director, a copy of a verified emissions report for approval and a copy of an associated verification report in accordance with the timeline as provided for in Document NAM-CATS-OPS 91;
- (b) must ensure that an emissions report contains the information as provided for in Document NAM-CATS-OPS 91;

- (c) must report a number of international flights and CO₂ emissions in accordance with a level of aggregation decided on by the Executive Director during an approval process of an emissions monitoring plan, which must either be at a level of state pair or aerodrome pair;
- (d) that uses a CERT is not required to report information on a type and mass of fuel used and must use the standardised emissions report template provided in Document NAM-CATS-OPS 91 for submission;
- (e) reporting on its consolidated CO₂ emissions from international flights, during the 2019-2020 period, must append to the main emission report the disaggregated data relating to each subsidiary aircraft operator; and
- (f) may request the Authority in writing, not to publish its CO₂ emissions monitoring data, as provided for in Document NAM-CATS-OPS 91.

(2) The Executive Director may publicly publish CO₂ emissions data after consultation with a concerned aircraft operator.

(3) A person aggrieved by the decision of the Executive Director to publicly publish CO₂ emissions data may appeal against that decision as provided for in these regulations.

Claims for carbon offsetting reduction scheme eligible fuel

91.10.11 (1) At owner or operator of an aircraft may not include carbon offsetting reduction scheme eligible fuel traded or sold to a third party from its total reported quantity of carbon offsetting reduction scheme eligible fuel.

(2) A owner or operator of an aircraft must declare other GHG schemes it participates in if emissions reduction from the use of carbon offsetting reduction scheme eligible fuel may be claimed, and that it has not made claims for the same batches of carbon offsetting reduction scheme eligible fuel under those schemes.

(3) A owner or operator of an aircraft must provide supplementary information as provided for in Document NAM-CATS 91 within a given compliance period, in order to claim emissions reduction from the use of carbon offsetting reduction scheme eligible fuel in an emissions report.

(4) A owner or operator of an aircraft may make carbon offsetting reduction scheme eligible fuel claim referred to in subregulation (3) on an annual basis in order to ensure all documentation is submitted timeously.

(5) A owner or operator of an aircraft must follow the procedures provided in Document NAM-CATS 91 to purchase fuel from a supplier downstream from a fuel blender.

Verification of CO₂ emissions

91.10.12 (1) An aircraft owner or operator's emissions report must be verified annually as follows –

- (a) by performing an internal pre-verification of its emissions report prior to the verification by a verification body;
- (b) by a verification body for the aeroplane operator's annual emissions report; and

- (c) by a verification body that is included in the list provided for in Document NAM-CATS 91.
- (2) A verification body must conduct a verification according to ISO 14064-3:2006, and the relevant requirements provided for in Document NAM-CATS-OPS 91.
- (3) A verified emissions report must be submitted, as provided for in Document NAM-CATS-OPS 91.
- (4) The requirements for the verification of carbon offsetting reduction scheme eligible fuel are as follows –
 - (a) fuel purchases, transaction reports, fuel blending records and sustainability credentials must constitute documentary proof for the purpose of verification and approval of emissions reductions from the use of carbon offsetting reduction scheme eligible fuel; and
 - (b) an aircraft owner or operator or its representative, must verify the production records for the carbon offsetting reduction scheme eligible fuel that it purchases as provided for in Document NAM-CATS-OPS 91.

Error corrections to emissions report

91.10.13 (1) If an error in an aircraft owner or operator's reported emissions has been identified by the Authority, by the verification body or by a owner or operator of an aircraft after CO₂ emissions have been submitted to ICAO, the Executive Director must –

- (a) update the reported CO₂ emissions to address an error identified; and
 - (b) assess any implications with respect to a owner or operator of an aircraft offsetting requirements in previous years and if necessary, make arrangements to compensate for the error during a compliance period in which an error has been identified.
- (2) The Executive Director must report an error in a owner or operator of an aircraft CO₂ emissions report and the results of a follow-up on related adjustments to ICAO.

Requirements for addressing data gaps

91.10.14 (1) An aircraft owner or operator of an aircraft using a fuel use monitoring method, must fill data gaps using the ICAO carbon offsetting reduction scheme cert, as provided for in Document NAM-CATS 91, provided that data gaps during a compliance period do not exceed the following thresholds -

- (a) 2019-2020 period: 5% of international flights; and
 - (b) 2021-2035 period: 5% of international flights subject to offsetting requirements.
- (2) A owner or operator of an aircraft must correct concerns identified with data and information management system in a timely manner to mitigate ongoing data gaps and system weaknesses.
- (3) If a owner or operator of an aircraft notices that it has data gaps and system weaknesses that exceed the threshold referred to in subregulation (1), the aeroplane operator must engage with the Executive Director to take remedial action to address the identified data gaps and system weaknesses.

(4) If a owner or operator of an aircraft exceeds the threshold referred to in subregulation (1), such owner or operator must state the percentage of international flights for the 2019-2020 period, or flights subject to offsetting requirements for the 2021-2035 period that had data gaps and must provide an explanation to the Executive Director in their annual emissions report.

(5) Aowner or operator of an aircraft must fill all data gaps and correct systematic errors and misstatements prior to the submission of an emissions report.

CO₂ offsetting requirements

91.10.15 (1) The offsetting requirements of carbon offsetting reduction scheme –

(a) must be applicable from 1 January 2021 to 31 December 2035, to an aircraft operator referred to in regulation 91.10.1, whose international flights are between Namibia and states defined in Document NAM-CATS-OPS 91.

(b) may not be applicable to a new entrant aircraft owner or operator of an aircraft –

(i) for three years starting from the year when such owner or operator meets the requirements under regulation 91.10.1; or

(ii) until the annual CO₂ emissions exceed 0.1 percent of its total CO₂ emissions from international flights in 2020, whichever occurs first.

(2) The Methods of calculation of emissions for offsetting requirements are as provided for in Document NAM-CATS-OPS 91.

(3) The Authority must calculate the annual aircraft owner or operator's final CO₂ offsetting requirements, based on the data reported in accordance with Chapter 2 of the carbon offsetting reduction scheme methodology for calculating actual life cycle emissions values and the applicability requirements as provided for in Document NAM-CATS-OPS 91.

Total final CO₂ offsetting requirements for given compliance period with emissions reductions from use of carbon offsetting reduction scheme eligible fuels

91.10.16 (1) The amount of CO₂ emissions required to be offset by an aircraft owner or operator of an aircraft after considering emissions reductions from the use of carbon offsetting reduction scheme eligible fuels from 1 January 2021 to 31 December 2035 given compliance period, must be calculated by the authority using the requirements provided for in Document NAM-CATS-OPS 91.

(2) If a owner or operator's of an aircraft total final offsetting requirements during a compliance period FORc is negative, the negative offsetting requirements may not be carried forward to subsequent compliance periods and such an aircraft operator may not have offsetting requirements for the compliance period.

(3) The total final offsetting requirements of an aircraft owner or operator of an aircraft must, during a compliance period FORc, be rounded up to the nearest tonne of CO₂.

(4) The Executive Director must inform an owner or operator of an iarcraft of its total final offsetting requirements, for a compliance period, according to the timelines for the given compliance period 2019 to 2020 as provided for in Document NAM-CATS 91.

Cancellation of carbon offsetting reduction scheme eligible Emissions Units

91.10.17 (1) The carbon offsetting reduction scheme eligible emissions units must be as provided for in Document NAM-CATS-OPS 91.

(2) The cancellation of emissions units must be applicable to an aircraft owner or operator of an aircraft subject to the offsetting requirements stipulated in regulation 91.10.15.

(3) A owner or operator of an aircraft must meet the offsetting requirements stipulated in regulation 91.10.15, as calculated by the authority, by cancelling carbon offsetting reduction scheme eligible emissions units in a quantity equal to its total offsetting requirements, for a given compliance period, FORc.

(4) A owner or operator of an aircraft must, to comply with subregulation (3), –

(a) cancel such carbon offsetting reduction scheme eligible emissions units within a registry, designated by a carbon offsetting reduction scheme eligible emissions unit programme, in accordance with the timelines as provided for in Document NAM-CATS-OPS 91; and

(b) request each carbon offsetting reduction scheme eligible emissions unit programme registry to make visible on the registry's public website, information on each of such aeroplane operator's cancelled carbon offsetting reduction scheme eligible emissions units, for a given compliance period, in terms of the timelines as provided for in Document NAM-CATS-OPS 91.

(5) Information for each cancelled carbon offsetting reduction scheme eligible emissions unit must include consolidated identifying information in an emissions unit cancellation report, as provided for in Document NAM-CATS-OPS 91.

Accreditation of verification body

91.10.18 (1) A owner or operator of an aircraft must engage a verification body, accredited by a national accreditation body, to ISO 14065:2013, ISO/IEC 17011:2004 and the relevant requirements as provided for in Document NAM-CATS-OPS 91, for the verification of its emissions unit cancellation report.

(2) A verification body must be accredited and comply with the standards specified in ISO 14064:3:2006, and the relevant requirements provided for in Document NAM-CATS-OPS 91.

(3) A owner or operator of an aircraft must upon request, by a verification body, provide access to relevant information on the cancellation of emissions units.

Verification of Emissions Unit Cancellation Report

91.10.19 (1) An aircraft owner or operator must report to the Authority the cancellation of carbon offsetting reduction scheme eligible emissions units carried out in accordance with regulation 91.10.18, to meet its total final offsetting requirements for a given compliance period, by submitting to the Executive Director for approval –

(a) a copy of a verified emissions unit cancellation report; and

(b) a copy of an associated verification report.

(2) An emissions unit cancellation report submitted to the Authority must contain information and be in accordance with the timelines provided for in Document NAM-CATS-OPS 91.

(3) A verification body referred to in regulation 91.10.18 must independently submit a copy of emissions unit cancellation report and associated verification report, to the Executive Director, in accordance with the timelines as provided for in Document NAM-CATS-OPS 91.

(4) The Executive Director must perform an order of magnitude check of emissions unit cancellation report submitted in terms of subregulation (3), in accordance with the timeline, as provided for in Document NAM-CATS-OPS 91.

Substitution of Part 121 of Regulations

5. The Regulations are amended by the substitution for Part 121 of the following Part:

“PART 121 AIR TRANSPORT OPERATIONS - CARRIAGE ON AEROPLANES OF 20 OR MORE PASSENGERS OR CARGO

LIST OF REGULATIONS

SUBPART 1: GENERAL

121.01.1	Applicability
121.01.2	Admission to flight deck
121.01.3	Passenger intoxication and unruly behaviour
121.01.4	Compliance with laws, regulations and procedures
121.01.5	Regulatory infractions during emergency situations
121.01.6	Language proficiency

SUBPART 2: OPERATIONS PERSONNEL REQUIREMENTS

Division One: Minimum crew requirements

121.02.1	Composition of flight crew
121.02.2	Minimum requirements for assignment as pilot-in-command
121.02.3	Crew pairing and in-flight relief of flight crew members
121.02.4	Flight and cabin crew member emergency duties
121.02.5	Cabin crew member complement
121.02.6	Operation on more than one type or variant by cabin crew member
121.02.7	Senior cabin crew member
121.02.8	Cabin crew emergency evacuation stations
121.02.9	Seating of cabin crew members during flight

Division Two: Qualification requirements

121.02.10	Flight crew member qualifications
121.02.11	Area, route and aerodrome qualifications
121.02.12	Flight engineer qualifications
121.02.13	Cabin crew member qualifications
121.02.14	Flight operations officer qualifications
121.02.15	Ground personnel qualifications

Division Three: Flight time and duty limitations

121.02.16	Flight time and duty scheme
121.02.17	Fatigue risk management system
121.02.18	Approval of fatigue risk management system
121.02.19	Fatigue risk management system manual